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University
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Education

**An Investigation of the Concept of Critical Thinking
in the Context of a Functional English course
in a BEd Degree in Pakistan**


by

Shaista Irshad Khan

MA English (Literature), MEd

**A Thesis Submitted in Fulfilment of the Requirements
for the Degree of Doctor of Philosophy (PhD)**

**School of Education
College of Social Sciences
University of Glasgow
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In memory of Nazo

My Beloved Aunt

To whom I owe everything

*She brought me up, gave me a wonderful example
of quality living and was the embodiment of love,
care and affection.*

*Anything good in me today is due to all that she
gave to me in her life.*

*It is to me a matter of great sadness that she did
not live long enough to see this work completed.*

I dedicate this thesis to her precious memory.

Abstract

The National Education Policy document published in 2009 in Pakistan emphasised that one of the wider goals for teaching and learning at all levels is the need to encourage and develop critical thinking skills. In the literature, these have been conceptualised in terms of a variety of skills many of which relate to evaluation. These skills imply the ability and willingness to ask productive questions related to the material that is being presented.

The Higher Education Commission, Pakistan, worked with a team from the United States Agency of International Development (USAID) Teacher Education Project to develop and implement the curricula for a new BEd Honours/ADE (Associate Degree in Education) programme. This has been offered in 22 Universities and 75 Elementary colleges in Pakistan since 2012. Critical thinking is specifically listed as a goal in the generic course outlines as well as in the objectives for the revised BEd/ADE degree.

The development and implementation of these planned new approaches to teaching and learning offered an opportunity to explore critical thinking at policy, course development and implementation levels. The revised Functional English course was chosen for this study because it was a compulsory course in BEd/ADE degree, giving access to the entire student teacher cohort. Based on the literature, the working definition of critical thinking adopted for this study is conceptualised as purposeful thinking which is to be seen in skills like analysis and evaluation, weighing arguments, judging the quality of evidence and the credibility of sources. The central feature is the skill and willingness to ask productive questions. Using the working definition as a point of reference, this study explored how undergraduate students and teachers perceived the nature of critical thinking as a concept as well as the set of skills that exemplify critical thinking. The study also examined the likely facilitators and barriers in the development of critical thinking as perceived by students and teachers involved in the course. Another theme that was explored was how the course guidelines were being followed in the context of the development of critical thinking.

This study was carried out in two Phases. Phase-I (at the start of the Functional English course) investigated the teaching and learning experiences of the participants in their previous English courses along with their expectations from the Functional English course in the context of critical thinking. Phase-II (at the completion of the Functional English course) explored the participants overall experience of studying Functional English including the extent to which this course met their expectations in terms of learning and their perceptions towards critical thinking skills. The study used a mixed method approach involving questionnaires, student teacher focus groups, teacher interviews in both phases and observation of classes during the course. 140 undergraduates (the entire cohort following the course in Hazara Region) studying Functional English in BEd/ADE and 7 English teachers were involved, across five institutions (2 universities and 3 colleges). The data were analysed using SPSS and NVivo.

The findings from Phase-I revealed that both students and teacher had little understanding of critical thinking as seen in the literature but, on the completion of the course (Phase-II), both conceptualised critical thinking as skills involving analysis, evaluation, synthesis, weighing best options, all underpinned by productive questioning. Both students and teachers identified the key role of questioning. However, they were unable to identify the specific kind of questioning involved. Nonetheless, observation of the classes did indicate that questioning of a productive nature was taking place. In terms of facilitators and barriers, both teachers and student teachers identified similar factors including student academic and social background, the role of the

teacher, the classroom environment, potential peer mockery, lack of confidence, lack of teacher training and the issues related to policy and practice.

The study revealed that the course had been well received by student teachers and teachers and was being delivered in line with the intentions of the course documentation. After five observation sessions, the lasting impression was gained of enormous student involvement, vibrant activity and vigorous discussion. It was evident that teachers used the course guidelines with flexibility and considerable imagination. Comparisons of Phase-I and II revealed that, with the emphasis on wider educational outcomes, there was a marked move among both teachers and students away from the dominant emphasis on memorisation and recall.

The evidence points to the simple principle that the way to encourage the development of critical thinking is to place learners regularly in situations where critical thinking skills are not only encouraged but are perceived to be valuable by the learners. In the Functional English course, this has been encouraged through interactions between learners working in groups or peer discussion, an approach that is broadly Vygotskian. Classroom observation as well as student teacher and teacher responses in focus groups and interviews respectively indicated that the more student-centred learning approach was providing opportunities for productive discussion and questioning through the range of different activities undertaken. With critical thinking seen as a curriculum goal, the study also suggests that there are no barriers intrinsic to either teachers or students in achieving this goal. Students value it. Given the guidelines, teachers enthusiastically encourage it. This suggests that the development of students as critical thinkers is facilitated by students gaining the confidence to ask questions of each other and their teachers. The study concludes by reviewing the strengths and weaknesses of the approaches employed as well as suggesting areas where future work might build on the findings of the study.

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Glossary

<i>Higher Education Students</i>	In Pakistan, this involves students follow first degree level courses in universities and affiliated degree colleges. These courses follow on from Grade XII (Intermediate).
<i>Student Teachers</i>	Students undertaking BEd (Honours) and ADE (Associate Diploma in Education) courses.
<i>Faculty who teach student teachers</i>	Academic staff in universities and affiliated colleges who teach students following the BEd (Honours) and ADE (Associate Diploma in Education) courses.
<i>School Students</i>	In this study, this includes school students up to Grade VIII.

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Author's Declaration

I declare that, except where explicit reference is made to the contribution of others, this dissertation is the result of my own work and has not been submitted for any other degree at the University of Glasgow or any other institution.

Signature _____

Shaista Irshad Khan

Chapter 1

Introduction

It is the mark of an educated mind to be able to entertain a thought without accepting it.

Aristotle

1.1 The Context of the Study

There are many features that mark out the twenty-first century. Among these, the century can be seen as the age of globalisation, telecommunications and digital technology, with the internet changing the way knowledge and understanding are to be seen, making it possible for a learner to access more or less anything at the press of a button. To meet these challenges, learners require to be equipped with the skills not only to access what they need but also to be able to analyse what they find in order to evaluate what is relevant, valid and important as well as how to interpret the information found. The quotation above reflects this approach. All this has major implications for education: Chaffee (2014) considers that this requires the ability to think critically in order to evaluate new information while Facione (1990, p.4) argues that there is a need to '*foster in students those cognitive skills and habits of inquiry associated with critical thinking*'.

Critical thinking has been conceptualised in many ways but it is often associated with the skills of being able and willing to question judgments, weigh arguments, judge the quality of evidence, evaluate claims, be aware of implicit assumptions and question possible interpretations. It might be seen as purposeful thinking guided by reasoned evidence, involving asking 'productive questions' (DiYanni 2015, p.4). In order to develop these skills, learners need to be given the opportunities to ask productive questions and this will require more open learning situations where students can interact with each other, with the teacher and with resources. This can often happen where there are tasks to be completed, group activities and peer discussion.

In Pakistan, the dominant paradigm is the teacher-as-knowledge-dispenser in schools and universities. The role of the student is that of knowledge recorder and memoriser while the role of examinations is to test how much has been retained accurately. Interactions within the classroom, other than students being asked to provide factual information, are rarely observed.

The typical classroom pattern is summarised in figure 1.1.



Figure 1.1 Pakistan's Education Paradigm

In teaching English in Pakistan, the same paradigm is also the norm. Thus, the traditional methods of teaching require teachers of English to impart a vast amount of information to students who are expected to accumulate the imparted information and reproduce it accurately in examinations. The award of university degrees, therefore, reflects the success of candidates in memorising enough information in unit time and having the skill to write it down in a coherent form on an examination script.

After long experience in working in Higher Education in Pakistan, Hoodhbuoy (2009) argues that the outcome is that, when students successfully gain their degrees, they remain unable to process and manipulate information, synthesise and evaluate ideas, to make connections between classroom learning and the practical world outside, or to generate personal and innovative ideas. In addition, they lack skills in evaluating knowledge and understandings, questioning meaning or significance, judging relevance or validity. In other words, they lack those key skills (such as being able to question judgments, weigh arguments, judge the quality of evidence, evaluate claims, be aware of implicit assumptions and question possible interpretations) that constitute critical thinking.

In this context, the National Education Policy (NEP, 2009) recognised the importance of wider skills, including critical thinking skills, and emphasised the need for radical change in order to reduce the dominance of memorisation and offer scope so that learners can start to develop the thinking skills that are seen to be important to meet the challenges of the modern world. Implicit in this policy is the need to rethink teacher education so that prospective teachers are aware of the importance of these skills and are equipped to encourage their development with future learners.

Following this policy, the Higher Education Commission decided to phase out the one year BEd programme that was currently being offered in universities, this change to be completed by 2016. Starting in 2009, the Higher Education Commission, working in collaboration with USAID, took the initiative to introduce major reforms in teacher education in Pakistan (HEC, 2012a). The purpose was to equip the prospective teachers with the latest skills to be demonstrated and pass on to the coming generations for a successful life and career. A pilot programme was started in several universities and affiliated colleges in 2012.

The collaborative programme involving the Higher Education Commission and USAID generated new policies and guidelines for teacher education courses: the Associate Degree in Education (ADE) and the BEd Honours. Both qualifications include a mandatory course in Functional English. In planning the new policies and guidelines, the development of skills like critical thinking have been specifically identified as important outcomes although the documents do not describe how critical thinking is to be conceptualised (HEC, 2010).

The Higher Education Commission (2012a) provided curriculum guidelines for the compulsory Functional English course and these advocated an approach to teaching and learning that was strongly student-centred. Kagan (2009) sees student-centred learning involving groups of students working together on various tasks. Here, the focus is on the learner, with the teacher acting as a facilitator assisting students in achieving the course objectives. This approach can be linked to the ideas of Vygotsky (1978) as developed by several writers (eg. Wass, Harland and Mercer, 2011), where the key role of learners, working together and supporting each other is emphasised. Vygotsky developed the idea of the zone of proximal development in the context of cognitive development with young children. This has been employed in relation to the development of critical thinking (Wass, Harland and Mercer, 2011) while Bruner (1960) coined the word, ‘scaffolding’ to describe the way a more experienced learner could offer support in the development of ideas, the support steadily being removed as the less experienced learner gained confidence. In the context of the Functional English course, working in groups offers students ways of supporting each other while the way the course guidelines are specified suggests an important role for the teacher in offering appropriate support.

Against this background, this thesis seeks to explore the way these developments have worked out in practice by looking at the Functional English course, this course being selected because it is taken by all BEd/ADE students. Specifically, how do the university teachers and students conceptualise critical thinking and how do their conceptions match those that exist in the wider literature? How does the implementation of the new Functional English course offer opportunities for the development of critical thinking and how can this be recognised? Are there any key facilitators and barriers that enable or hinder the development of critical thinking to take place successfully?

1.2 Aims and Research Questions

In seeking to address the issues mentioned above, the aims of this research study are to:

- 🕒 Investigate English teachers' and students' perceptions of critical thinking before and after studying Functional English-I in ADE/B.Ed (Honours)
- 🕒 Identify the potential facilitators and barriers English teachers and students perceive in delivering and fostering critical thinking through Functional English.
- 🕒 Observe the implementation of prescribed syllabus and the extent to which course guidelines are being followed in the Functional English class.
- 🕒 Explore the indicators that critical thinking has been understood, taught, learned and applied in a day-to-day context.
- 🕒 Make recommendations for possible ways forward in fostering critical thinking.

From these aims, the following research questions have been constructed to achieve the objectives set for this study:

- (1) What are English teachers' and students' perceptions of critical thinking before and after studying Functional English course in ADE/B.Ed (Honours)?
- (2) What do teachers and students consider to be facilitators and barriers in fostering critical thinking through the Functional English course?
- (3) To what extent does the delivery of the course foster development of critical thinking in the classroom?

1.3 Significance of the Study

This study is focussed on the nature and development of critical thinking and the Functional English course was chosen as the context of this study because this is a mandatory course in the revised BEd/ADE Programmes. Thus, the course involves all students following the teacher training programme, making generalisability of any findings more plausible. The policy of the Higher Education Commission is to encourage

the development of critical thinking. The Functional English course guidelines have interpreted this overall policy to specify and encourage the development of skills which constitute critical thinking. This study has been undertaken from the assumption that it is possible to nurture critical thinking skills in students through the Functional English course.

The study seeks to explore how the understanding of the nature of critical thinking exists with students and their teachers at the start of the course and how this changes during the course. This may assist in identifying aspects needing further development or, perhaps, gaps left by previous education provision. The ultimate goal is that students should be enabled to think critically. This involves the skills of critical thinking as well as understanding the nature and value of such thought. By means of the questionnaires, focus groups, interviews and observations, it is hoped that the features of the course that are of perceived value in encouraging the development of critical thinking can be identified. This will provide direction for future planning and teaching.

Although this study is about the Functional English course, what is found may offer help to guide course developers in other courses so that new guidelines for these courses can be developed that reflect any successful features found in the Functional English course. Overall, the findings of the study may offer useful pointers to indicate how critical thinking may be developed in the context of higher education in Pakistan in general, as well as raising the profile of the need for critical thinking in Pakistan.

1.4 Overview of the Study

A mixed method approach has been adopted for this study which includes both quantitative and qualitative methods. This provides an opportunity to investigate the problem by means of different tools, from various perspectives and angles. Working with a group of 140 typical undergraduate students who were all studying the mandatory Functional English course in BEd/ADE programme and their 7 English teachers in five institutions (2 universities, 3 colleges) of Hazara Region, Khyberpaktunkhwa Province. The research followed two phases:

Phase-I At the start of the Functional English course

Phase-II Near the end of the Functional English course

The data were collected using questionnaires, student teacher focus groups, teacher interviews (one-to-one) during both phases, along with observations of 5 classes as they were being taught during the course. The questionnaires provided information on the general trends towards learning English in previous courses and the expectations from the Functional English course. Interviews, focus groups and observations provided insights related to perceptions of critical thinking and perceived barriers and facilitators in developing critical thinking skills. From the data, a picture was gained of the situation towards the start of the course (Phase-I) as well as towards the end of the course (Phase-II), allowing a comparison which was interpreted to indicate where developments had taken place in relation to critical thinking.

1.5 Outline of the Thesis

In the light of this overview, the study is presented in the following way:

- Chapter Two Provides a summary of the provision of education in Pakistan and recent reforms in teacher education, showing where critical thinking is seen to have a place in higher education.
- Chapter Three Considers the literature related to critical thinking, the way critical thinking has been conceptualised as purposeful thinking to be seen in a set of skills, the core features of critical thinking and ways by which such skills can be developed.
- Chapter Four Gives an analysis and interpretation of the documentation related to the Functional English course with specific emphasis on the development of critical thinking skills.
- Chapter Five Outlines how the research was carried out, showing the way the tools were constructed and used as well as the way the data were handled.
- Chapter Six Summarises the findings from Phase-I (at the start of the course), looking at previous learning and teaching experiences in English courses and the expectations of students and teachers along with how they understood the nature of critical thinking and factors that might assist or hinder its development.
- Chapter Seven Summarises the findings from Phase-II (towards the end of the course), outlines how the expectations of students and teachers had been fulfilled and the way their understandings of critical thinking had changed and the kind of ways that assisted or hindered its development. The observational data were related to this, giving insights into what actually happened during the course in relation to critical thinking.
- Chapter Eight The findings are discussed, conclusions are drawn and the study is reviewed critically, with suggestions for future work along with recommendations.

Chapter 2

Education in Pakistan

Education is the kindling of a flame, not the filling of a vessel.

Socrates

2.1 Introduction

In the quotation above, Socrates presented a wide vision for education and, in Pakistan such an approach is highly relevant. This chapter seeks to provide an overview of the key features and issues facing the education system in Pakistan. Although the emphasis of this thesis lies in higher education, a brief overview of the situation at school and college levels is offered to illustrate the educational background of undergraduates in Pakistan. The theme of this thesis revolves around critical thinking but it is important to outline the educational context and culture where recent developments in relation to critical thinking have taken place in Pakistan. Before doing this, an overview of Pakistan, its geography, population and the overall education system and education policies, is outlined in order to grasp the opportunities as well as the potential challenges that exist in seeking to encourage critical thinking in higher education.

After the British left the sub-continent, Pakistan emerged as a nation state in 1947, a multiethnic and multilingual nation state for Muslims, with significant minorities also living there. The World Bank (2009) recorded the population as 170 million residing in four provinces (Punjab, Khyberpakhtunkwa (KP), Sindh and Baluchistan) but more recent estimates place the population over 190 million (World Bank, 2016).



Figure 2.1 Map of Pakistan

According to the last census report (Census, 1999), 32.5% of the population live in urban and 67.5% in rural areas, including the Federally Administered Tribal Areas (FATA) with a population of 3.18 million. The population of Pakistan is growing by 2.9 per cent annually, which is the highest in the world and, if this continues, by 2025, Pakistan's population will be 225 million and 335 million by 2050 (Cohen, 2011), with potentially major implications for education. A large population of Pakistan is young, with a third of the population under 15, half under 20, two thirds under 30. According to UNDP's Human Development Index for 2009, Pakistan is placed at the lower end of the Medium Development group of nations and ranked 141st of 182 countries (Coleman, 2010).

The National language of Pakistan is Urdu with at least 6 other major languages spoken in different provinces of the country. Urdu is the mother tongue for only 8% of the population (Rahman, 2002). Urdu symbolises national cohesion and integration (NEP, 2009). Since independence, English has tended to have been associated with the ruling elite in towns and cities and has consequently been identified as the language of power and domination but efforts to replace it with Urdu have proved impossible because English holds a status as an international language (Wright, 2004). Thus, English has remained the language of the elite of the country, with educational importance and is considered to be important in modernisation, scientific and technological development, and economic advancement at an individual and national level (Shamim, 2008) and is now seen to be mandatory as a medium of instruction for all university education (Aly, 2007). Thus, enhancing proficiency in English is also an important part of the discourse of improving the quality of education in Pakistan. Given the central importance of English in Pakistan education, there are opportunities to develop a wider range of skills like critical thinking with the entire student population.

An overview of the challenges facing the education system in Pakistan is now presented.

2.2 The Education System in Pakistan

Education is an important investment for human and economic development. The constitution of Pakistan places emphasis on the importance of uniformity in Pakistan's education system and makes the state responsible for an equitable and effective education system (NEP, 2009). Section 9 of the Constitution (Eighteenth Amendment) Act (2010)

added an extra article (article 25a) effective from April, 2010. This article states:

“Right to education The State shall provide free and compulsory education to all children of the age of five to sixteen years in such manner as may be determined by law”.

The statement signifies the commitment of government to universal education up to age 16. However, this also poses a challenge for the Pakistan government in the provision of resources to achieve implementation of this article. Resourcing schools adequately is a major political issue (Economic Survey of Pakistan, 2014-15). Expanding the system to provide universal education will not be easy.

The education system of Pakistan involves five levels (UNESCO, 2010) - table 2.1.

Level	Grades	Ages	Awards
Higher Education	Postgraduate		Masters and doctorates
	Undergraduate	18+	Moving to 4 year degrees
Intermediate	11-12	17 -18	Higher Secondary School Certificate
High	9-10	15 - 16	Secondary School Certificate
Middle	6 - 8	11 - 14	
Primary	1 - 5	5 - 10	

Table 2.1 Education Structure in Pakistan

Various reports and economic surveys give information on the various levels (Nordic 2006; Economic Survey of Pakistan, 2014-15). It has to be recognised that the education system involves huge numbers at every stage, as shown in table 2.2.

Number of Mainstream Institutions, Enrolment and Teachers by Level (in thousands)									
<i>Data in thousands</i>	Enrolment			Institution			Teachers		
Year	2012-13	2013-14 (P)	2014-15 (E)	2012-13	2013-14 (P)	2014-15 (E)	2012-13	2013-14 (P)	2014-15 (E)
Pre-Primary	9284.3	9267.7	9220.2	-		-	-	-	-
Primary*	18760.1	19441.1	19935.4	159.7	157.9	158.7	428.7	420.1	413.6
Middle	6188.0	6460.8	6772.6	42.1	42.8	43.2	362.6	364.8	375.7
High	2898.1	3109.0	3297.6	29.8	30.4	32.6	489.6	500.5	518.0
Higher Secondary/ Intermediate	1400.0	1233.7	1249.6	5.0	5.2	6.0	132.0	124.3	146.4
Degree Colleges	641.5	674.4	801.3	1.5	1.1	1.0	48.8	26.0	23.5
Technical and Vocational	302.2	308.6	318.7	3.3	3.3	3.4	16.1	16.4	16.6
Universities	1594.6	1594.6	1828.3	0.147	0.161	-	77.6	77.6	83.2
Totals	41062.1	42089.9	43423.7	241.5	240.9	244.9	1555.4	1529.7	1577.0
Source: Ministry of Professional & Technical Training, AEPAM, Islamabad E: Estimated, P: Provisional, *: Including Pre-Primary & Mosque Schools									

Table 2.2 Statistics of Pakistan Education (Economic survey of Pakistan 2014-15, p.178)

With enrolments at over 43 million and nearly one quarter of a million institutions, the demand for teachers is enormous at over 1.5 million (table 2.2).

The Economic Survey of Pakistan (2011) identifies many of the challenges facing the school system. These include an acute shortage of teachers causing large classes, a lack of adequate teacher training and inadequate resources. School curricula are often content-dominated, making teaching mainly a knowledge transfer process, while there is endemic cheating in the examination system which rarely rewards anything other than rote recall. All of this has major implications related to the quality of students admitted to university. This means that the students entering higher education will have work patterns that focus on memorisation, examination goals that stress recall at the expense of neglecting wider skills, including critical thinking (Bashiruddin, Bana, and Afridi, 2012).

The next section outlines some aspects of current educational provision at school level which may have implications for the development of critical thinking in higher education, specifically related to English language learning.

2.2.1 Aspects of School Education Provision in Pakistan

Inevitably, school education directly affects the educational achievements of children at secondary, higher secondary and higher education. The rapid growth of schools has arisen partly because of rapid population growth along with the rapid development of private education which is often seen as a good way to make money. All this has posed challenges in meeting the needs for well-trained and highly competent teachers, leaving some English medium schools offering a poor experience from the perspective of English language as the medium of instruction (Shamim and Allen, 2000; Rahman, 2008 cited in Shamim, 2008). Dini Madrassas are also being run parallel to English and Urdu medium schools with their own curriculum mainly focusing on religious education (NEP, 2009). Thus, Pakistan has four categories of school-level education:

- Private elite English medium schools
- Private non-elite English medium schools
- Government Urdu medium schools
- Dini madaris (madrassas)

The main features of the four types of schools are shown in figure 2.2.

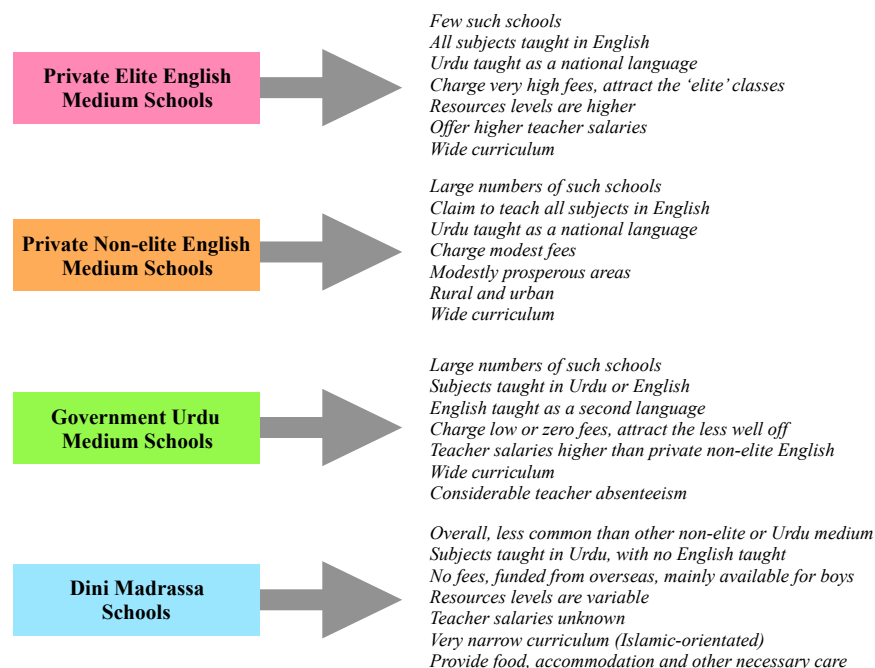


Figure 2.2 Features of Pakistan Schools (Adapted from Coleman, 2010)

Coleman and Capstick (2012) note that the issue of the language of instruction has never been fully settled in Pakistan with views switching back and forth often at the whim of individuals. In government schools, the medium of instruction is Urdu. However, some public sector Pushto and Sindhi medium schools are found in Sindh and KP province. Some federally administered well-resourced government schools and cadet colleges also use English as a medium of instruction. In the government sector, Urdu medium schools are considered to be low in status compared to English-medium schools (Rahman, 2002, 2004 cited in Shamim, 2008). The Urdu medium schools tend to attract teachers who came into teaching because they fail to find openings in other jobs (Rashid and Mukhtar, 2012). The outcome of this is less commitment with many teachers which can affect student performance.

The language of instruction in the schools system has major ramifications for Higher Education. This places many school students at a significant disadvantage where they leave school unable to recognise simple words in English. Andrabi *et al*, (2007), the authors of the LEAPS (Learning and Education Achievements in Punjab Schools, 2007) concluded that a child who drops out of school at the end of Year 3 will be functionally illiterate and innumerate, being literate requires the completion of primary stages of education. Even at the end of school, such students, irrespective of latent ability, are severely disadvantaged compared to others.

The low literacy rate in Pakistan places many young people at a disadvantage and makes higher education inaccessible. Pakistan's literacy rates compare unfavourably with

adjacent countries (table 2.3).

Country	Adult Literacy Rate
East Asia and Pacific	94
Bangladesh	57
India	63
Pakistan	55

Table 2.3 Some Adult Literacy Rates (source: United Nations Data, 2013)

In addition, the highly divided school education system leaves many parents having a lack of confidence in government schools to deliver quality education. Parents sometimes attempt to move their children either to private schools or to arrange additional private tutoring and, in other cases, children are required to quit school and join income earning activities (NEP, 2009).

The Economic Survey of Pakistan (2011) identified what it described as the challenges facing much school education in Pakistan:

The acute shortage of teachers	Defective curricula
Poor or absence of laboratories	Poorly trained teachers
Dual medium of instruction	Shortage of physical facilities
Overcrowded classrooms	Rote learning
Poor examination system encouraging cheating	

Table 2.4 Quality Problems in School Education (Economic Survey of Pakistan, 2011)

Many of the issues in Pakistan's education system are related to the way education is governed and organised. The federal government is responsible for curriculum development and textbooks approval. However, textbooks development and assessment are the prerogative of provincial textbook and examination boards. At district level, the District Education Office has been made responsible for teacher recruitment, school budgets, in-service teachers' training and monitoring of teaching and learning in schools. There is a strong need for shared implementation strategy of policy decisions among all levels of authorities (Shamim, 2008). By contrast, the Higher Education Commission of Pakistan has a regulatory role, including developments in teacher education at higher education level.

The brief description above illustrates the many challenges facing school education in Pakistan. Of relevance to this thesis is the observation that school education focusses almost entirely on the presentation of information, with its subsequent recall in

examinations, wider skills being almost absent. In a situation where the educational experience varies considerably from school to school, students entering higher education often face challenges on many fronts: language competency, confidence, ways of thinking and attitudes to learning. Since the development of wider skills like critical thinking holds a very low priority at school level, this may generate difficulties for students when undertaking higher education studies.

2.2.2 Aspects of Higher Education Provision in Pakistan

Pakistan's Higher Education Ordinance (2002) defines higher education in terms of *'education at bachelor's and higher degree courses including post-graduate certificates, diplomas, and research and development activities'* [chapter 1(g)]. Within the wider area of education, higher education normally encompasses post-school academic and professional education, leading to the award of degrees at, initially, bachelor's level.

Higher education in Pakistan takes place in universities and colleges. Although both universities and colleges undertake teaching, research is restricted to the universities. Universities and colleges follow the charter of Federal Government or respective provincial governments to award degrees. Universities cannot go beyond the territorial jurisdiction of their respective province and, if they do, they are considered illegal and degrees awarded by such universities are not recognised.

All the colleges must fall under the authority of a university in their area of jurisdiction and the university controls the award of degrees and determines the courses of study, prescribes the syllabus and conducts the examinations. The affiliated colleges are intended to prepare the students for the university examinations. There are currently 161 government and private universities in Pakistan including those run by the army (Economic Survey of Pakistan, 2014-2015). The rate of growth in the higher education sector has been enormous (figure 2.1). Some universities have been created by provincial governments to benefit their area, some by the Army (which seeks to develop high quality provision), while some private universities have been founded for financial motives. The number of potential students is rising rapidly. One of the great issues with such a rate of growth relates to quality (Raouf, Ahmad and Awan, 2011).

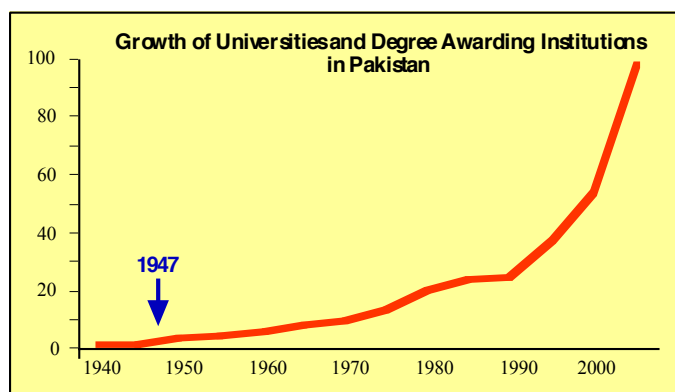


Figure 2.3 Exponential Growth Since Independence (1947) in Higher Education in Pakistan

Figure 2.1 illustrates a major challenge in Pakistan: quantity expands rapidly; quality is at risk (Raouf, Ahmad and Qureshi 2009, p.94). The Higher Education Commission was set up by the Government in 2002 in order to address some of the key issues related to quality and access to higher education.

2.2.3 The Role of the Higher Education Commission

Responsibility for higher education in Pakistan involves both federal government and the provincial governments. The Higher Education Commission was established in 2002, with responsibility for the higher education sector. It is an autonomous organisation directly under the rule of the prime minister, with a wide mandate to improve and promote higher education and research. The Commission has a role of developing links between higher education institutions and the surrounding society, ensuring that the higher education institutions meet the needs of industry and employment markets. It looks after quality assurance, accrediting the institutions of higher education and laying down the conditions for the establishment of private institutions.

The Higher Education Commission has been set up to, *‘Formulate policies, guiding principles and priorities for higher education institutions for promotion of socio-economic development of the country’* [chapter 2-10(a)] (Higher Education Ordinance, 2002). Besides it is charged with, *‘Guiding institutions in designing curricula that provides a proper content of basic sciences, social sciences, humanities, engineering and technology in the curricula of each level and guide and establish minimum standards for good governance and management of institutions and advise the chancellor of any institution on its status and regulations’* [chapter 10(v)].

The Higher Education Commission has developed a development framework (HEC medium term development framework II, 2011-2015). The overall mission for the HEC is to '*facilitate Institutions of Higher Learning to serve as an engine of socio economic development of Pakistan*'. Some of the features of their mission are listed in table 2.5 (overleaf).

1	The top priority of HEC is the improvement of academic standards and research.
2	The MTDF-HE is based on Vision 2030. It emphasised on conversion of knowledge into socio economic enterprise, globalisation, dispersion of information and technology.
3	HEC focuses on faculty development, quality improvement, and maximising the opportunities for acquisition of higher education.
4	All academic institutions require effective vision and strategies to produce quality graduates. It is crucial to produce highly skilled professionals that respond to the need of the market place.
5	Progress in academics and research both guided by the needs of community, industry and the country at large.
6	In accordance with worldwide paradigm shift from 'Teaching' to 'Learning' program of study will focus on ensuring maximal absorption of subject matter by the students.
7	University graduates must be good ethical human beings with sound values. Ethics must be taught at all levels of tertiary Education.
8	We will continue to ensure that curricula are modern, challenging, progressive and designed towards the matrix of the global knowledge society.
9	We will support innovative ways of delivering lifelong learning, both traditionally and through new technologies.
10	To enhance students' English language communication skills to match the demand of the market place.
11	Exclusive capacity building of English teachers will be done in language into literature through specific training Modules in research technology, testing and assessment pedagogical.
12	Introduction of uniformity and standardization of curricula, revision of curricula on a three year cycle, collaboration of universities and industry, it will continue to be conducted to ensure its quality and relevance.
13	Widening access and improving participation in higher education is crucial part of HE's Mission.

Table 2.5 Source: Higher Education Development Framework II (2010-15)

The importance of English as a medium of instruction is to be seen in items 10 and 11. This seems influenced by an awareness of the global impact of education. UNESCO is also aware of the global issues when they stress the importance of thinking globally but acting locally (UNESCO, 2009). For Pakistan, Higher Education developments must take global standards very seriously but the way implementation occurs must suit the needs of Pakistan as a society. Parveen *et al.* (2011) note that developments in Higher Education in Pakistan have mainly taken place in the past 20 years or so.

The Higher Education Commission is seeking to set in place the mechanisms to implement the developments which are consistent with broader educational policies laid down by the Federal Government. These policies are now summarised briefly.

2.3 Pakistan Education Policies

The Government of Pakistan has published frequent policy documents since independence, often every five years or so. While such policy documents present very positive statements of intent but it is obvious when looking at the subsequent documents that previous policies have not been implemented. A wide group of stakeholders (federal and provincial government educational officials, education experts, academia, private organisations, non-government organisations and international development partners) helped in formulating the education policies. The aim was to generate a higher degree of ownership in the provinces, regarded as essential for effective implementation, as education is a provincial responsibility in Pakistan. This means that, while major policy decisions are taken nationally, the entire implementation is carried out provincially. The latest policy document on education is being discussed here in order to explore the place of critical thinking in the document.

2.3.1 National Education Policy (2009)

The current National Education Policy (NEP, 2009) was developed after a long series of deliberations with different stakeholders considering all aspects of the education sector.

The review process for National Education Policy was started in 1998-2010 and the white paper, finalised in 2007, was the base of development of the policy document. Different factors including the political changes in the country and lengthy consultation process caused delay in the finalisation of the policy document. The previous policy 1998-2010 faced challenges in achieving the goal in several major aspects including access, quality and equity of educational opportunities and this prompted the Ministry of Education to review the policy and paved the way for the latest policy document 2009. Policy responses are necessary for changes in technology, labour market patterns and general global environment. An education policy cannot be prepared in isolation from these realities.

The purpose of the National Education Policy 2009 was to chart out a national strategy for guiding education development in Pakistan, most notably in the domains of curriculum development, textbook and learning materials and provision of missing facilities. In chapter 6 of the Policy, the challenges faced by teacher education in Pakistan are addressed.

In considering curriculum development, the Policy (NEP 2009, p.45) states that the curriculum will be objective driven and outcome based, focussing on learning outcomes rather than content. It must reflect important social issues; provide more room for developing the capacity for self-directed learning, the spirit of inquiry, critical thinking, problem-solving and team-work; and employing local contextual material.

The Policy document notes that the assessment system suffers from several deficiencies in promoting quality education, including the practise of rote learning which blocks innovative learning and the development of wider skills. The Policy argues for the inculcating of critical and analytical thinking skills to produce life-long, independent learners. In the document, it is argued strongly that assessment should reward analytical and critical thinking (NEP 2009, p.48).

The Policy sees these recommendations being fully implemented by 2030. This involves implementing a curriculum designed to facilitate critical thinking, problem solving, team work, and knowledge application, with every classroom resource designed appropriately to achieve these goals (NEP 2009, p.54). In all of this, critical thinking has been emphasised as a curriculum objective and as a key element in the assessment system. In this context, the goals of the Higher Education Commission are consistent with the Federal Government policy.

It is one thing to develop a policy document but implementation may be more challenging and Rasool (2007, cited in Ahmad *et al.* 2012) has noted that Pakistan has faced problems in implementation of policy in general and in education in particular. According to Ahmed *et al.* (2012) the factors responsible for the failure of implementation are lack of political commitment, poor economic conditions, non-involvement of stakeholders and discouraging and non-cooperative attitude of the government functionaries. They observed that highly ambitious policy targets, political instability, teacher absenteeism, lack of physical facilities and lack of supervision cripple the implementation of policy. There are several areas where policy and implementation do not cohere: these can be described as implementation gaps. However, there are signs of a greater coherence between Federal Government Policy and provincial implementation in recent years (NEP, 2009).

The government policy document (NEP, 2009) not only sees education in terms of ‘the medium and vehicle for the preservation, transmission and promotion of cultural values’

but also as the means of moving a society forward and releasing human potential. In this, the document recognises the importance of teacher education. To make progress, prospective teachers need to develop the wide range of skills (including critical thinking) envisaged in the policy document and learn how to encourage these skills with school students. The next section offers a summary of teacher education in Pakistan.

2.4 Teacher Education in Pakistan

One of the challenges in reforming the education system is in ensuring consistent quality across a large system.

Teacher education programmes are offered in:

- Government Colleges of Elementary Teachers
- Government Colleges of Education
- Institutes of Education and Research
- University Departments of Education

Provincial Education Departments and Education Extension Centres exert considerable control over school teacher education. In 2001, teacher education was altered, aiming to improve quality. Admission to primary school teachers' colleges (Grades I - VIII) required either 10 or 12 years of schooling. Students with a matriculation background (10 years of schooling) are required to complete a 3-year teacher-training programme, while students who have passed Grade XII require one and a half (1½) year. Successful candidates obtain a Diploma in Education. A one-year BEd qualification is required for teachers wishing to teach Grade IX and X at secondary level, following their four year degree (BA or BSc). A two-year MEd postgraduate degree is needed to teach at grades XI and XII.

Fazal, Khan and Majoka (2014) have summarised recent developments relating to teacher education in Pakistan and much of this has been strongly influenced by USAID. Despite numerous government reports and policy documents, Pakistan has not developed much in its educational provision (Kazi, 1987; Mitchell *et al.*, 2005; Burki, 2005 cited in Fazal, Khan and Majoka, 2014). Teacher Education has also suffered and has tended to remain static, retaining many of the features inherited from the country's colonial past. Khan (2013) and USAID (2013) note the main issues today include:

- a curriculum that has remained static over decades;
- an infrastructure incapable of supporting change;

- structural hindrances in adopting any innovation;
- an emphasis on ‘theory’ that bears little relationship to classroom practice;
- a lack of classroom reality in the courses offered;
- very limited practicum opportunities;
- a lack of credibility, with those offering course often lacking teaching experience.

With about 1.35 million teachers working in all sectors from primary to higher education, there is a complex system of teacher education, encompassing initial teacher education and in-service support. The subject matter and curriculum for the institutions offering courses are supervised by the Bureau of Curriculum (UNESCO, 2009). Although the Education Policy of Pakistan (2009) emphasises the importance of up-to-date knowledge and teaching skills, progress has been slow. However, the Higher Education Commission and USAID have moved things forward and brought major reforms in Teacher Education. These are now discussed in the following section.

2.5 Restructuring Teacher Education in Pakistan and the Role of USAID

Fazal, Khan and Majoka (2014) note the importance of both pre-service and in-service training for teachers needs to be emphasised and Pakistan has often lacked good opportunities for professional development. It has been observed that the curriculum and its assessment tends to ignore wider educational goals such as the development of critical thinking skills (Government of Pakistan, 2002; World Bank, 2006). Obsolete pre-service teacher training, infiltration of malpractices and bad governance have all been factors that lowered the respect for the teaching profession in Pakistan (DIFSD and USAID, 2006). There are many factors beyond the control of the teachers (the curricula to be taught, the national assessment policies and procedures, resource levels and so on). Nonetheless, the quality of the teacher is an important factor in developing quality education (Almadani, Reid and Rodrigues, 2011). However, this quality will be strongly influenced by the quality of teacher training and support. Almadani, Reid and Rodrigues, (2011) observed, in the context of quality assurance, that teachers are often blamed for educational problems but it has to be recognised that much is beyond the control of teachers.

In this context, there is clearly an opportunity for re-structuring teacher education in Pakistan. There has been increased collaboration between international donor agencies and the Pakistan government in developing teacher education, with USAID making a huge

contribution, working with NGOs, in providing financial and technical support to build and enhance the capacity of the education system in Pakistan. It is investing \$87 million in higher education to develop expertise and leadership in education, business, civil service and civil society. USAID is currently providing merit and need based scholarships and since 1950 almost 1700 students have studied in USA under the Fulbright scholarship program, the aim being to generate academic leadership for the future.

The involvement of educational input from another country generates the possibility of considerable enrichment. However, there are some issues that need to be addressed. For, example, to what extent can policies and procedures from one country be implemented in another, particularly when the two countries have very different educational cultures. This issue is sometimes described as '*policy borrowing*' (Phillips and Ochs, 2003; Ozga and Jones, 2006; Raffe and Semple, 2011) which may or may not work across diverse cultures. In the case of the USAID project in Pakistan, policy borrowing was not involved. What USAID brought involved resources and expertise. The policies for Pakistan were developed by Higher Education Commission and the Ministry of Education. The policies and procedures have been widely welcomed not only in the wider education community but also at local level.

The recent developments in teacher education have involved the introduction of two programmes: a two year Associate Degree in Education (ADE) and a four year Degree in Education (BEd). The Higher Education Commission gave approval for both programmes and the teacher education project, following collaboration between USAID and the Government of Pakistan since 2008. Considerable training has now been offered to the teachers involved and the emphasis has moved towards much higher levels of student involvement in the learning process and a move away from the practice of lecturing (Hanushek, Kain and Rivkin, 2004; Ladd, 2008). For implementation, two organisations have been important: the Education Development Centre (EDC) established under the USAID in partnership with Teachers College, Columbia University (USAID, 2013a); and the Higher Education Commission of Pakistan (HEC).

The Education Development Centre aims to bring together expertise in educational programme development, programme management, training and technical assistance and evaluation of the USAID Teacher Education Project while the Higher Education Commission seeks to facilitate the development of Pakistani universities which are able to

compete on the world stage in terms of offering quality education and world-class research (USAID, 2013b).

The new two-year Associate Degree in Education is an undergraduate program and constitutes the first two years of the honours programme for the BEd course. Features of the programme include a much greater emphasis on active learning, with a marked increase in the time allocated to teacher practice in schools and a high status given to the use of ICT. The USAID Teacher Education Program has adopted a role where it supports the implementation of these developments and, to date has assisted 22 universities and 75 teacher education colleges in their planning. The new degree has been introduced in 45 colleges and 12 universities across the country (EDC, 2012). The overall aim is to raise standards to be closer to global standards. In line with this the Higher Education Commission has phased out the traditional BEd (one year) and MEd (one year) programmes in 2016 (Hussain, 2013).

In seeking to raise standards, it is critical to attract very able and committed students into these courses from rural and urban areas. To this end, around 1880 scholarships have been awarded so far during the Teacher Education Project. In addition, the Teacher Education Project seeks to work closely with personnel at provincial levels and the project is steadily gaining recognition throughout all areas of the country. Thus, USAID has invested US\$75 million into teacher education projects across all of the provinces of Pakistan (Khan, 2013).

Pakistan's National Curriculum Review Committee has collaborated with the Higher Education Commission to generate a standard design of studies for the four year Bachelor in Education degree. The EDC (2012) reports that teacher educators observe a change in their own teaching strategies. The report says that teachers have moved from predominantly teacher-centred lectures to student-centred collaborative learning. Rizvi and Qazi (2013) reported that 90% of teachers in the Punjab were knowledgeable about collaborative learning and 80% had grasped the new focus of assessment as developed in Teacher Education Project workshops. Furthermore, Bokhari and Rizvi (2013) found considerable progress relating to the use of ICT. The new programmes set up within the Teacher Education Project appear to have enabled teachers and teacher educators to re-conceptualise their roles according to collaborative learning.

In a sense, the teachers have adjusted direction, moving the focus of the emphasis from the curriculum to be taught to the students to be taught (figure 2.3).

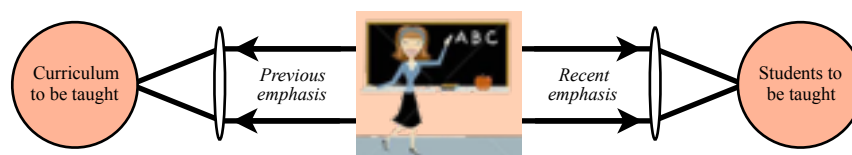


Figure 2.4 Paradigm Shift in Teacher Emphasis

Khan (2013) observed the under-emphasis on the practical side of teaching in traditional courses in Pakistan: for example, only tenth of the time was devoted to practical experience in the previous one year programme; most of the time was spent in attending formal lectures; the lecture programme was largely unrelated to practical teaching. In the new ADE course, almost 50% of the time is devoted to teaching practice. The assessment of teaching practice does not depend on external examiners but students are taught to evaluate themselves and justify their position based on the rubrics they are required to develop during their practice sessions. While the intention is to make the teacher education process a better preparation, it is too early to say whether this has been achieved. While significant progress has been made, challenges remain and these are now considered in the section below.

2.6 Teacher Education in Pakistan: Implementation Challenges

Much effort has been put into the successful implementation of new Teacher Education Programmes. However, research studies show that the implementation of the new teacher training programme was facing many challenges: the lack of adequate equipment and technical infrastructure proved to be a major hindrance in the implementation of the new curricula for ADE and BEd Hons programs (Ayub and Khan, 2013). Although teachers seem very intrigued by the new curricula and student-centred approaches, classroom observation rarely reveals the expected activity being implemented (Akbar *et al.*, 2013; Mahmood *et al.*, 2013). Sheikh *et al.* (2013) observed a gap between theory and practice in terms of implementation of the new curriculum.

The new programmes of ADE and BEd (Hons) attracted many students not because they desired to adopt teaching as a profession but for the incentives these programmes offered

in terms of scholarships and possibility of finding better jobs in the future (Samo *et al.*, 2013). However, it seems difficult to maintain the enrolment of prospective teachers in future without incentives. The lack of senior faculty at various institutions is another big challenge, especially with newly established universities (Mahmood *et al.*, 2013). Many heads of the department are superannuated (retired) and their services cannot be retained on a long-term basis. Similarly in Teacher Education Institutions, frequent transfer of trained faculty for administrative and political reasons is a routine generating instability.

Prospective teachers may find it difficult to practice what they are being taught in the classrooms due to inadequate facilities and instructional aids required for such approaches in schools. Thus, the new programmes may have exposed prospective teachers to better ways forward but resources prevent their implementation. There is little change in the paradigm of thinking with prospective teachers, who tend to revert to teaching methods similar to those they have experienced as students (Saifi *et al.*, 2013).

USAID is aware of the sustainability issue and has taken into account key aspects like leadership, ownership, capacity development, long term vision, national teacher education goals, coordination, accountability, adaptability and systematic approach, and took special measures to sustain the changes. There has been a serious attempt to develop ownership of the changes laid out in the National Education Policy (2009), ownership relating to provincial management of education as well as teacher training (USAID, 2013). The hope is that in the presence of all these elements, sustainability of the programme has been ensured to a great extent.

Despite these problems, one major area is the greater stress on the practical element of the courses where teaching practice in school assumes a higher profile. In addition, there are major attempts to integrate theoretical and practical components of the teacher education programmes with more emphasis on preparing prospective teachers on a more practical basis, while at the same time having exposure to modern understandings of the educational process and pedagogy and enhanced coordination among teacher education colleges, universities and schools.

2.7 Teacher Education and Critical Thinking in Pakistan

The focus of this thesis is on critical thinking and it can be argued that critical thinking is an important learning outcome for higher education. While there is general agreement that critical thinking is important, there is less consensus, and often lack of clarity, about what exactly constitutes critical thinking (to be discussed in chapter 3). This section explores the place of critical thinking in teacher education programmes (ADE, BEd) in Pakistan. The Pakistan Higher Education Qualification Framework set the following learning outcomes for ADE and four year Bachelors including BEd Honours programmes (table 2.6).

	Two Year Associate Degree	Four Year Bachelors
Knowledge	Graduates will have specialised and integrated technical and theoretical knowledge with depth within one or more fields of work and learning	Graduates will have coherent and advanced knowledge of underlying principles and concepts in one or more disciplines and knowledge of research and principles and methods
Skills	Graduates will have: <ul style="list-style-type: none"> • Cognitive skills to identify, analyse, synthesise and evaluate information and concept from a range of sources • Cognitive, technical and creative thinking skills to demonstrate a broad understanding of knowledge and ideas with some depth in a discipline • Cognitive, communication and analytical skills to interpret and transmit responses to sometimes complex problems • Communication skills to make a clear and coherent presentation of knowledge and ideas with some intellectual independence 	Graduates will have: <ul style="list-style-type: none"> • Cognitive skills to review, analyse, consolidate and synthesis knowledge to identify and provide solutions to complex problem with intellectual independence • Cognitive and technical skills to demonstrate a broad understanding of a body of knowledge and theoretical concepts with advanced understanding in some areas • Cognitive skills to exercise critical thinking and judgment in developing new understanding • Technical skills to design and use research in a project • Communication skill to represent a clear and coherent exposition of knowledge and ideas to a variety of audiences.
Application of Knowledge and Skills	Graduates will demonstrate the application of knowledge and skills: <ul style="list-style-type: none"> • With initiative and judgment in planning, problem solving and decision making in paraprofessional practice • To adapt knowledge and skills in a range of contexts and/or for further studies in one or more disciplines • To adapt fundamental principles and techniques to known and unknown situations • With responsibility and accountability for own learning and work and in collaborations with others within broad parameters 	Graduates will demonstrate the application of knowledge and skills: <ul style="list-style-type: none"> • With initiative and judgment in professional practice and/or scholarship • To adapt knowledge and skills in diverse contexts • With responsibility and accountability for own learning and practice and in collaboration with others within broad parameters • To plan and execute project work and/or a piece of research and scholarship with some independence

Table 2.6 Summary of Higher Education Qualification Framework, p. 3-4

It is helpful to specify some of the intended goals for both programmes, though the difficulty rests in how these goals are to be interpreted. Thus, for example, the framework refers to ‘*identify, analyse, synthesis and evaluate information and concept from a range of sources*’ and this seems to depend on a taxonomy developed by Bloom *et al.* (1964) and thus the terms may well be understood in the way they were used there. However, it also refers to, ‘*technical and creative thinking skills*’ but it is not so self-evident about what is meant here. Similarly, it refers to problem solving and seems to imply that this is a generic skill when all the evidence suggests otherwise (Johnstone, 1993; Reid and Yang, 2002).

The guidelines use the phrase, '*adapt fundamental principles and techniques to known and unknown situations*' but it is very difficult to know what this means.

By contrast, the outcomes for the four-year degree are little easier to interpret. Of considerable importance, it refers to '*critical thinking and judgment in developing new understanding*' although there is no amplification of what is meant. Nonetheless, it does indicate that critical thinking is seen as an important outcome and it does seem to imply that the skill is directed at understanding. Understanding involves questioning meaning. The way critical thinking can be conceptualised will be discussed in detail in chapter 3.

2.8 Summary

This chapter has aimed to provide a brief contextual overview of the situation in Pakistan and provide a context for this study. With a very rapidly growing population and enormous growth in both the school and higher education sectors, the Pakistan education system is under considerable strain, with resource and workforce difficulties. In a country with multiple first languages along with the way English has assumed a global significance in academic study, the population is often very divided depending on the medium of instruction at school levels. Higher education seeks to provide a more level playing field by offering mandatory courses in English in all degree courses so that all can take advantage of instruction in English and the academic literature.

National Education Policy (2009) has set out an ambitious programme to be implemented over a 20 year period. Included in this is a move towards the development of a curriculum and assessment system that seeks to equip learners with the skills that may prove increasingly important in coming decades and this includes skills like critical thinking although what is meant is somewhat opaque. In line with this, the Higher Education Commission of Pakistan has moved the degree structure to four year undergraduate degrees and laid considerable emphasis on the development of such skills.

In order to move these objectives forward, the Higher Education Commission has recognised the key importance of teacher education, and working with USAID has undertaken major developments although there are still challenges relating to attracting and retaining teachers as well as implementing the new programmes for teacher education. As part of these developments, the Higher Education Commission has overtly sought to

move the emphasis away from the transmission of information and its recall in examinations towards the development of a wider range of highly desirable skills. Among these is the development of critical thinking although there is a lack of clear specification of what is intended and how such thinking might be developed. In this context, the next chapter considers the nature and development of critical thinking.

Chapter 3

Critical Thinking in Higher Education

‘Closed minds cannot innovate, create art and literature, or do science. Modern education is all about individual liberty, willingness to accept change, intellectual honesty, and constructive rebellion. Critical thought allows individuals to make a revolutionary difference and to invent the future. Else, they will merely repeat the dysfunction of the past’.

(Hoodbhoy, 2009, p. 592)

3.1 Introduction

Written in the context of Pakistan education, the comments of Hoodbhoy highlight the important role for development of critical thinking. In chapter 2, while looking at the education in Pakistan it has been noted that much of the emphasis is on memorisation and recall. To improve the quality of education, the system needs to move from mere transmission of knowledge to a more comprehensive approach including the development of thinking skills. The importance of developing critical thinking skills has been reflected in the Higher Education Commission’s (HEC) guidelines as an objective set for higher education (HEC, n.d.) although they did not define how they understood critical thinking.

This chapter starts by considering how critical thinking has been conceptualised in the literature and how critical thinking differs from other aspects of thinking. Based on how the literature conceptualises critical thinking, a working definition of the nature of critical thinking, and how to develop the skills necessary for critical thinking will be discussed along with some insights into the role of critical thinking in Higher Education. In order to establish an appropriate perspective, the prevailing situation of the way critical thinking is perceived and developed in Pakistan will be reviewed. An effort will be made to identify, from the literature, the facilitators and barriers that may be important in developing critical thinking.

Critical thinking often appears to be a complex process and it is possible to approach it from several directions. Before looking at details of critical thinking and what it means, it is useful to consider critical thinking in the wider context of thinking in general. It is probably helpful to divide thinking into different categories or skills, as will be discussed in the following sections.

3.2 The Nature of Thinking

Thinking is a mental activity, not usually open to direct observation. Thinking relies on past experiences but can lead to new insights. The work of Baddeley and Andrade (2000) has shown that it takes place in the working memory and limited capacity may be a controlling factor (Johnstone, 1997). Thinking will involve a range of mental operations. Griffen (2001) sees these operations as thinking skills while Smith (2002) refers to acquired abilities or capacities. However, several authors have highlighted the issue of willingness to employ the skills (Coles and Robinson, 1991; Johnson and Gardner, 1999), a point also stressed by Al-Osaimi *et al.* (2014).

Thinking can be described in terms of a range of skills (Jerwan, 2009; Swede, 2003; Zaitoon, 2003; Saadah, 2003). Fisher (2005) has identified the processes of perception, memory, concept formation, language and symbolisation as the fundamental cognitive skills underlying the ability to reason, learn, and solve problems. Reid and Yang (2002), in their review of problem-solving, saw thinking in terms of a person seeking to find some solution to some problem they may be facing but thinking is more than solving problems. These are examples of thinking being seen in terms of the outcomes. In an educational context one of the most important outcomes of thinking can be seen as understanding or what Ausubel (1978) described as ‘meaningful learning’. He sees meaningful learning as the opposite of rote learning and he describes meaningful learning involving new knowledge being related with previous knowledge to create greater understanding.

One approach has been to list different kinds of thinking in order to build up an overall picture. This has generated a bewildering array of categories. Habib (1996) and, later, Jerwan (2009) have offered collations of these categories (table 3.1).

<i>Kinds of Thinking</i>		
Analytical Thinking	Scientific Thinking	Lateral Thinking
Concrete Thinking	Verbal Thinking	Reflective Thinking
Creative Thinking	Vertical Thinking	Abstract Thinking
Deductive Thinking	Effective Thinking	Mathematical Thinking
Impulsive Thinking	Convergent Thinking	Cognitive Thinking
Ineffective Thinking	Critical Thinking	Sensory Thinking
Logical Thinking	Productive Thinking	Inferential Thinking
Metacognitive Thinking	Inductive Thinking	Exploratory Thinking
Synthetic Thinking	Absolute Thinking	Philosophical Thinking

Table 3.1 Types of thinking (based on Habib, 1996; Jerwan, 2009)

With 27 categories listed (table 3.1), it is not easy to differentiate critical thinking from some of the others on the list: for example, logical thinking, synthetic thinking, productive thinking, reflective thinking, inferential thinking.

In an interesting analysis, Al-Osaimi *et al.* (2014) presented four categories of thinking. Thinking cannot be divided up into neat categories but this analysis has the advantage of being simple, as well as relating to much research activity. The four approaches are:

<i>Critical thinking:</i>	Involves asking the questions how, what and why of information, its sources and its significance (Al-Osaimi <i>et al.</i> , 2014).
<i>Scientific thinking:</i>	‘The unique characteristics of scientific thinking relate to the nature, place and handling of experimentation, including the place of hypothesis formation’ (Al-Ahmadi and Reid, 2011).
<i>Creative thinking:</i>	The creation of something novel, valued in some way by someone. This product may be an artefact, an idea, a new insight, or a new way of looking at some problem or issue (Baillie, n.d.).
<i>Systems thinking:</i>	The development of a comprehensive understanding of the systems under investigation (derived from Chandi <i>et al.</i> , 2009).

It has to be stressed that thinking is a coherent, integrated process. Dividing into categories is artificial: these kinds of thinking may reflect thinking for different purposes. Although the approach of Al-Osaimi *et al.* (2014) was developed in a science context, it was based on a wide review of the literature on critical thinking and was not seen to be limited to science areas of the curriculum. The analysis has some advantages:

- (a) It offers an increased measure of simplicity;
- (b) It allows a clearer specification of curriculum goals;
- (c) It assists in developing assessment: goals are clearer in operational term

Overall, the features of thinking can be summarised (figure 3.1).

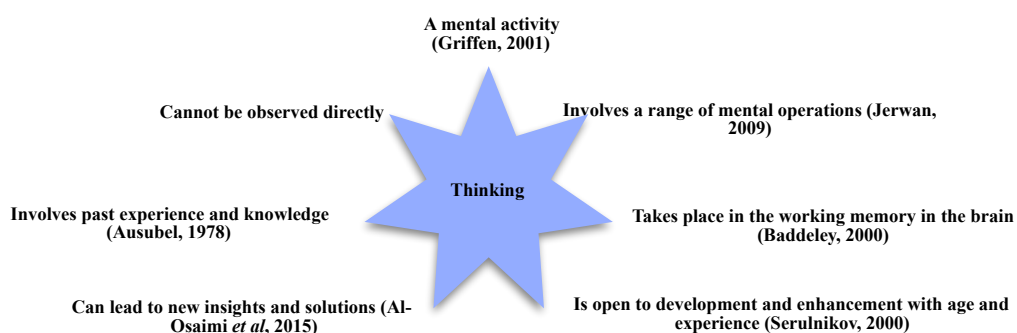


Figure 3.1 Features of Thinking

In the light of the insights described above, it can be argued that thinking perhaps can be conceptualised in terms of complex mental processes in which an individual processes incoming information and may form concepts, may engage in problem solving, reasoning and making decisions.

Having looked at the wider context of thinking, the task is now to look to the world-wide literature on critical thinking, its nature, development and measurement. The first stage is to look at how the nature of critical thinking is perceived.

3.3 The Nature of Critical Thinking

How critical thinking might be seen in the context of wider thinking has already been outlined (3.2). However, by distinguishing critical thinking from other aspects of thinking, it may prove easier to develop a clearer conception of what it is about critical thinking that makes it different. Hence, the focus now is on how critical thinking itself is seen in the literature. Educational writings are replete with strong statements that advocate the development of critical thinking skills in formal education (e.g. Paul and Elder, 2008a; Coughlin, 2010; Senechal, 2010) but there is much less that clearly establishes the meaning of the phrase '*critical thinking*' or how to develop it and measure its development.

In a review of the literature on critical thinking, Lai (2011) noted three different academic strands in defining critical thinking, reflecting different perspectives. Her analysis is now summarised below and each of the approaches is briefly explored. Her goal is to emphasise the importance of critical thinking and to encourage teachers to seek its development.

3.3.1 The Philosophical Approach

Lai (2011) starts by considering the approaches of Socrates, Plato, Aristotle and, more recently, Mathew Lipman and Richard Paul to exemplify this philosophical approach. This approach considers critical thinkers as an '*ideal type*', focussing on what people are capable of doing under the best circumstances (Sternberg, 1986). This ideal type is conceptualised in terms of the formal logic systems used in philosophical thought.

The issue with philosophical approaches is that they tend to be built on the requirements of formal logical systems but such systems may not correspond exactly to critical thinking itself although critical thinking may well employ such systems from time to time. In fact, Sternberg (1986) notes that formal logical systems may or may not correspond to how people actually think. His focus is on younger learners, at school stages, but his criticism may still be valid at any age. The critical thought of a learner may or may not correspond

to the model provided by philosophical analysis where the focus of the analysis is on logic.

One way of looking at this is to suggest that the rules of logic can perhaps give us a model of how people *might* think critically, if the circumstances were propitious. However, Sternberg (1986) perceptively notes that there are numerous potential limitations: time limitations, having access to limited information, as well as the well-known restrictions brought about by fixed and limited working memory capacity. Nonetheless, the philosophical approach can offer some useful insights.

Definitions emerging from this philosophical approach include:

- 💡 *'the propensity and skill to engage in an activity with reflective skepticism'* (McPeck, 1981, p. 8);
- 💡 *'reflective and reasonable thinking that is focused on deciding what to believe or do'* (Ennis, 1985, p. 45);
- 💡 *'skillful, responsible thinking that facilitates good judgment because it 1) relies upon criteria, 2) is self-correcting, and 3) is sensitive to context'* (Lipman, 1988, p. 39);
- 💡 *'purposeful, self-regulatory judgment which results in interpretation, analysis, evaluation, and inference, as well as explanation of the evidential, conceptual, methodological, criteriological, or conceptual considerations upon which that judgment is based'* (Facione, 1990, p. 3);
- 💡 *'disciplined, self-directed thinking that exemplifies the perfections of thinking appropriate to a particular mode or domain of thought'* (Paul, 1992, p. 9);
- 💡 *'Thinking that is goal-directed and purposive, 'thinking aimed at forming a judgment,' where the thinking itself meets standards of adequacy and accuracy'* (Bailin et al., 1999 b, p. 287);
- 💡 *'judging in a reflective way what to do or what to believe'* (Facione, 2000, p. 61).

Although the philosophical approach can offer some insights, its weakness lies in the way it depends on logic and there is no certainty that this neatly reflects what learners actually do. It represents a kind of ideal, based on the rationality of a logical approach. However, it tends to ignore all kinds of limitations that may hinder the development of critical thinking. By contrast, the cognitive psychological approach looks more at observable outcomes.

3.3.2 The Cognitive Psychological Approach




Lai (2011) goes on to discuss the cognitive psychological approach which contrasts with philosophical approach in two ways:

- (1) The approach tends to consider critical thinking by the types of actions or behaviours critical thinkers are able to demonstrate;
- (2) It focusses on how people actually think rather than considering ideal thinking under ideal circumstances (Sternberg, 1986).

The outcome of this approach is to generate lists of skills and procedures deemed to be those used by critical thinkers (Lewis and Smith, 1993). This runs the risk of dissecting the nature of critical thinking into supposed specific skills and procedures, thus losing the overall picture. Bailin *et al.* (2010) is aware of this danger when she is critical of seeking to view critical thinking as a series of discrete steps or skills. She sees this as a fundamental misconception arising from a behaviourist perspective. According to the behaviourist argument, because the actual process of thought is unobservable, it is necessary to focus on the products of such thought: observable behaviour or observable skills, like the ability to ask questions, interpret materials or offer good analyses of what is taught and vocalise possibilities of bias.

Behaviourism was the dominant paradigm of thought in the early decades of twentieth century in much psychology, reflecting a rejection of considering aspects of the behaviour which were not directly observable. Thus, for example, outward behaviour could be described and measured but the thought processes that might have underpinned behaviour were not legitimate targets for study. Similarly, attitudes could not be studied and measured but the behaviour that arose from such attitudes was a legitimate focus of research. This latter view was challenged by the leading psychologist Louis Leon Thurstone when he published his paper entitled, '*Attitudes can be measured*' (Thurstone, 1929).

The emerging definitions from this approach are:

-  '*the mental processes, strategies, and representations people use to solve problems, make decisions, and learn new concepts*' (Sternberg, 1986, p. 3);
-  '*the use of those cognitive skills or strategies that increase the probability of a desirable outcome*' (Halpern, 1998, p. 450);
-  '*seeing both sides of an issue, being open to new evidence that disconfirms your ideas, reasoning dispassionately, demanding that claims be backed by evidence, deducing and*

inferring conclusions from available facts, solving problems, and so forth' (Willingham, 2007, p. 8).

In essence, the cognitive psychological approach focusses on the kind of cognitive skills that might be encompassed by critical thinking. The approach depends on observable behaviours and there is no doubt that such skills are important. However, by focussing more on the observable, there is a danger that the underlying disposition in the mind of the learner is neglected. In addition, perhaps critical thinking is more than some kind of collation of skills and procedures.

3.3.3 The Educational Approach

Benjamin Bloom and his associates are included in this category (Lai, 2011). However, Bloom *at al.* developed their taxonomy in the context of assessment and saw it originally as hierarchical. In his cognitive taxonomy, Bloom (1956) argued for six levels in what was to be assessed. Bloom and his colleagues developed their ideas in the context of an educational system which was dominated by rewarding recall. Following extensive observation and discussion with young learners, they postulated their six levels of 'cognitive processes' (Krathwohl, 2002, p. 214). This is shown in figure 3.2. Their goal was to challenge those who set examination papers so that they could classify questions into one of their six levels. This allowed examiners to reduce the emphasis on recall (what Bloom referred to as 'knowledge' and Krathwohl called 'remember') and to aim to generate more questions that tested the cognitive processes like understanding, application, analysis, synthesis and evaluation (see figure 3.2). In this, they appear to have had considerable success.

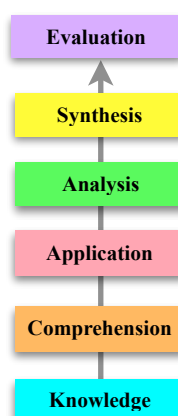


Figure 3.2 Bloom's Taxonomy

Huitt (1998) has questioned the hierarchical nature of the taxonomy, where skills at any level are seen to be contingent on successful skills at lower levels. The taxonomy has been modified many times and Draper (2016) has compiled a useful summary in the context of Higher Education. The various modifications attempted to address the two problems in the original taxonomy. One problem related to doubts about the hierarchical nature of the taxonomy while the other related to the fact that the evidence of understanding comes from the ability to apply what is known in a novel situation. In looking at critical thinking in Higher Education, analysis, synthesis and evaluation (higher order skills) are almost certainly relevant.

The advantage of the educational approach is that it is based on classroom observation in the context of assessment (Sternberg, 1986). However, the approach tends to leave the definition of critical thinking somewhat vague (Ennis, 1985; Sternberg, 1986). The educational literature tends to be couched in aspirational terms, seeing the development of critical thinking skills as highly desirable, leaving definitions somewhat uncertain. The uncertainty of definitions is influenced by the difficulty in linking Bloom's taxonomy (or subsequent modifications) to critical thinking. The taxonomy was developed specifically as a guide to assessment and as a mechanism by which the over-dependence on recall questions might be reduced.

3.3.4 Bringing the Three Approaches Together

Having summarised the three main approaches identified by Lai (2011), it is useful to bring their insights together. The philosophical approach emphasises the process of logic and describes critical thinking as a kind of ideal thinking based on logic. The cognitive approach tends to focus on the outcomes of critical thought, such outcomes being observable in some way. The educational approach has elements of both but has tended to depend on taxonomies developed originally to guide assessment and, as a result, has generated understandings that are somewhat ill-defined.

Nonetheless, although there are differences among the three school of thoughts and all three approaches are deficient in one way or another with regards to critical thinking, there are, however, areas for agreement among these approaches (Lai, 2011). The areas for agreement are specified in terms of mental procedures adopted by those who are thinking critically. These can be summarised:

- Analysing arguments, claims, or evidence (Ennis, 1985; Facione, 1990; Paul, 1992; Halpern, 1998);
- Making inferences using inductive or deductive reasoning (Ennis, 1985; Facione, 1990; Paul, 1992; Willingham, 2007);
- Judging or evaluating (Ennis, 1985; Lipman, 1988; Facione, 1990; Tindal and Nolet, 1995; Case, 2005);
- Making decisions or solving problems (Ennis, 1985; Halpern, 1998; Willingham, 2007).

In this, there is a need to consider the viewpoints of others or to look for more than one piece of information, to analyse arguments and claims, to explore possible ways of making deductions, and to question judgments and evaluations. The outcome being that decisions will be more likely to be based on evidence.

In looking at the list above, there is considerable overlap with the Higher Education Qualification Framework (HEC, n.d.) summaries (pp. 3-4 and p.23). This document speaks of reviewing, analysing and synthesising knowledge, it emphasises understanding and refers to critical thinking and judgement. However, while the approach is useful, it tends to reduce critical thinking to some kind of set of skills, predispositions or procedures and does not see critical thinking in any holistic way. This is not to suggest that critical thinking is a personality trait in any permanent sense. However, the need is to look at what characterises the critical thinker (in any specific situation) that makes them different from the person who is not thinking critically? This links into the idea where many authors have seen critical thinking more in terms of a predisposition rather than a list of skills (Facione, 1990). Thus, the willingness to question is important. For example, Ennis (1985) refers to the asking and answering of questions for clarification, defining terms, identifying assumptions, interpreting and explaining. There are also questions to be asked in relation to concepts of likelihood and uncertainty (Halpern, 1998); predicting (Tindal & Nolet, 1995); and seeing both sides of an issue (Willingham, 2007). Facione (1990) is typical in arguing that critical thinking not only involves skills or abilities but also requires willingness to use such skills or abilities, often described as dispositions. The most commonly cited critical thinking dispositions include:

- Open-mindedness (Ennis, 1985; Facione 1990; Halpern, 1998; Bailin *et al.*, 1999; 2010);
- Fair-mindedness (Facione, 1990; Bailin *et al.*, 1999);
- The propensity to seek reason (Ennis, 1985; Paul, 1992; Bailin *et al.*, 1999);
- Inquisitiveness (Bailin *et al.*, 1999; Facione, 1990, 2000);
- The desire to be well-informed (Ennis, 1985; Facione, 1990);
- Flexibility (Facione, 1990; Halpern, 1998);
- Respect for, and willingness to entertain, others' viewpoints (Facione, 1990; Bailin *et al.*, 1999).

In the context of Functional English courses in Higher Education in Pakistan, each of the above can be exemplified to illustrate possibilities, based on what these authors said (table 3.2):

Dispositions	Being willing to
Open-mindedness	Move beyond the rigidities of thought-forms which may be culturally imbued and linked extensively to language structures and vocabulary
Fair-mindedness	Be objective in weighing arguments, evaluating evidence, drawing conclusions (in the texts being studied)
The propensity to seek reason	Look at extended texts for the logic of the argument Look at the logic underpinning grammar
Inquisitiveness	Explore the underpinning standpoints of authors Grasp the subtleties of tenses and contexts
The desire to be well-informed	Seek new ideas, even challenging ideas Seek for the meaning of experiences that are novel
Flexibility	Look at meaning from multiple standpoints Seek alternative ways by which ideas can be communicated
Respect for other viewpoints	Take seriously the perspectives of others, even when these diverge markedly from one's own perspective

**Table 3.2 Illustrations of Dispositions in Functional English Learning
(author's interpretation)**

Underpinning the development of critical thinking dispositions lies a background of what the individual person knows. Background knowledge plays an important role in critical thinking and possessing the appropriate background knowledge is essential if critical thinking is to occur (Case, 2005; Willingham, 2007). Thus, it is very difficult to think critically on issues where there is a lack of knowledge or experience. If this is done, it is too easy to come to biased conclusions simply because of lack of evidence, understanding or experience. While many today may pass all kinds of critical comments about subject matter they neither know nor understand, genuine critical thought does require that the person has the requisite knowledge of the subject matter.

In the Delphi Project (Facione, 1990) a panel of experts constituted by the American Philosophical Association came to the conclusion that critical thinking is synonymous with '*good thinking*', in the sense that truly critical thought can only be exhibited by those with both the ability and the disposition to think critically (Facione 1990; Bailin *et al.*, 2010). A little thought suggests that there is almost a cyclical argument here: critical thinking has been defined as '*good thinking*' and '*good thinking*' has been defined as critical thinking. It almost implies that good thinking has to be critical thinking. Reducing critical thinking to a set of '*good thinking*' skills fails to recognise that critical thought is as much an attitude of mind and cannot simply be seen as a collation of skills, no matter how desirable such skills may be.

More recently, Manan and Mehmood (2015) summarised the views expressed in the literature in identifying the key role of questioning in underpinning critical thought (Paul, 1992; Halpern, 1998) which has been conceptualised as possessing the following qualities: analysing arguments, claims, or evidence; making inferences; evaluating; leading to decision-taking or problem-solving.

While this summary is a useful collation, it has the same weakness of conceptualising critical thinking in terms of a set of skills, failing to recognise that critical thinking is more than following a set of skills but is closer to a disposition (Bailin *et al.*, 2010). The weakness in the approach arises because Manan and Mehmood (2015) are approaching critical thinking as an *alternative* to the teacher-centred approach. In the context of the prevailing situation in Pakistan higher education, the teacher is seen as the source of knowledge to be dispensed to the students as efficiently as possible. The teacher is often seen as beyond contradiction and the idea of questioning what is taught is contradictory to the cultural norm. However, Manan and Mehmood (2015) do grasp the key feature of critical thinking when they say,

‘Critical thinking at the very basic level is an individual’s ability to question and evaluate information Contrary to critical thinkers, passive thinkers tend to answer questions with yes-or-no-view, considering their views and facts as the only sensible and the relevant ones.’

(p.112)

In much of the literature it has become apparent that the tendency has been to see critical thinking as a set of skills. Sometimes this is expressed as a set of dispositions but skills and dispositions at times seem to overlap. The real issue is to identify the key defining features of critical thinking that are different from other forms of thought. This unique feature relates to the asking of questions directed at new material reaching the learner, and how that material is to be evaluated and understood. The other characteristic feature common in many of the studies outlined above is the “willingness” to think critically: learners may well not think critically if they perceive no advantage in doing so. Figure 3.3 brings together these key ideas.



Figure 3.3 Key Underpinning Principles (source: author)

In contrast to considering critical thinking as a set of skills or predispositions, it is possible to look for the key features of critical thinking that mark it out as different from other aspects of thinking (Al-Osaimi *et al.*, 2014). This conceptualises critical thinking more in terms of a fundamental mindset. A mindset can be seen as a way of thinking rather than a collation of skills. This way of thinking can be observed often in terms of the skills demonstrated and predispositions held. This implies that critical thinking is generic in nature. Whether critical thinking can best be seen as domain/subject-specific or generic will be discussed further in the following section.

The aim now is to develop a way of looking at critical thinking which will underpin the approach adopted in this study. This also gives a model against which the perceptions of students and teachers in the Functional English course in Pakistan can be viewed.

3.4 Critical Thinking: The Working Definition Adopted in This Study

Based on the previous studies as reviewed above, this section seeks to develop a working definition of critical thinking that is based on the fundamental defining feature of all critical thinking. The typical approach of listing either supposed mental processes or offering lists of outcomes does not address the fundamental issue of what it is about critical thinking that differentiates it from other aspects of thought. Indeed, it is argued that critical thinking is more than a set of skills or dispositions; critical thinking can be conceptualised as a way of thinking that encompasses skills and dispositions. Thus, Pithers and Soden (2000, p. 239) emphasise this in their review when they say, ‘critical thinking involves abilities in addition to certain dispositions’. The goal in this section is to generate a working definition for this way of thinking to function as a benchmark against which the situation in Pakistan can be interpreted.

The writings of Ennis (1985), Facione (1990), Paul (1992), Halpern, (1998), Tindal and Nolet (1995), Willingham (2007), Al-Osaimi *et al.*, (2014) DiYanni (2015) and Manan and Mehmood (2015) suggest that the fundamental feature of critical thinking underpinning all the lists of predispositions and outcomes implies asking questions. This has two aspects: the questions need to be ‘productive’ (DiYanni, 2015) and the learner must be ‘willing’ to ask the questions and be motivated to inquire. These questions include judging the quality of evidence, evaluating the credibility of sources, being open minded and aware of

implicit assumptions as well as considering the viewpoints of others (Wass, Harland and Mercer, 2011). Potential answers to the questions need to be weighed mentally and the evidence supporting the answers considered. This includes salient features mentioned by large numbers of writers: analysis, evaluation, and inference, scepticism, making judgements and weighing evidence.

This thesis seeks to explore how critical thinking is perceived by the students following the Functional English course in Pakistan along with the views of their teachers. The study also provides an opportunity to see if there are any signs that the kind of skills conceptualised in the literature as being part of critical thinking are occurring during the course. The Delphi study (Facione, 1990) offers a list of skills and predispositions that the participants saw as characteristic of critical thinking. However, critical thinking not only involves the ability to employ such skills but also requires a willingness to think this way and to see why it is useful. In this, it is possible to see the skills as underpinned by purposeful thinking (ability and willingness to ask productive questions). Possessing this way of thinking forms the basis for the effective use of the skills and dispositions. The overall literature picture is summarised in figure 3.4.

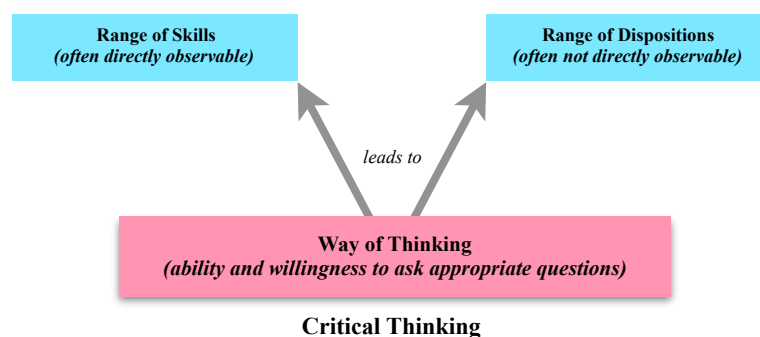


Figure 3.4 The Fundamental Way of Thinking that Constitutes Critical Thinking
(source: author, synthesised from literature)

Another way of seeking to understand critical thinking is to look for its absence. This was proposed by Paul and Binker (1990). Al-Osaimi *et al.* (2014) took this idea further when they suggested considering ‘*uncritical thinking*’ in terms of never questioning what is taught, the agenda of the source or what the material meant or even the potential bias of the listener. He summarised the comparison in diagrammatic form (figure 3.5):

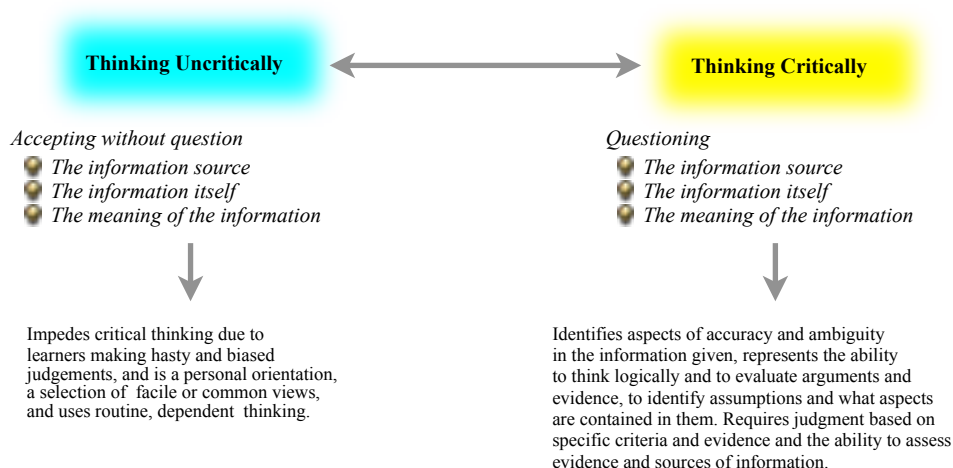


Figure 3.5 Thinking critically and uncritically (Al-Osaimi *et al.*, 2014)

The suggested approach offers insight into the nature of critical thinking. It sees critical thinking not as a set of skills, procedures or predispositions but as purposeful thinking that encourages the asking of pertinent questions. The questions are directed at what is presented, the source of the information and what the information might mean. In figure 3.6 below, the questions are directed three ways. Examples of the kind of questions are shown.

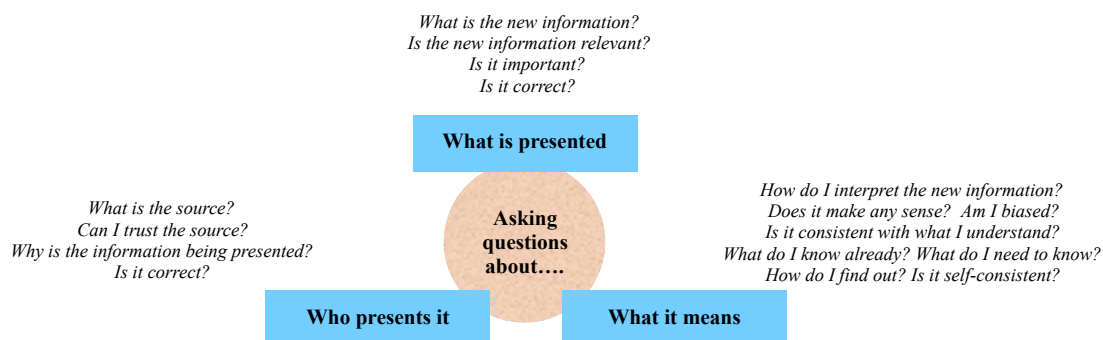


Figure 3.6 Asking Questions (source: author, derived from Al-Osaimi *et al.*, 2014)

This approach takes the line of seeing critical thinking as a concept rather than basing it on a list of skills. However, it focusses on asking questions, the central skill linked to critical thinking in most of the analyses in the literature (Ennis, 1985; Facione, 1990; Paul, 1992; Halpern, 1998; Tindal and Nolet, 1995; Willingham, 2007; Al-Osaimi *et al.*, 2014; DiYanni (2015); Manan and Mehmood, 2015). This approach provides a framework for interrogating any formal teaching and learning situation and applies it to all subject areas, whether in formal or informal settings. In this, critical thinking is seen in terms of the ability and willingness to ask questions - productive questions.

The approach can be applied readily into the learning of English. It allows learners to ask questions of what they are being told or what they are reading. It encourages learners to

explore any agendas that the speakers or writers may have. It challenges any biases the reader may possess. The learner is also questioning the meaning of what is spoken or read as well as questioning whether there are better ways to communicate ideas clearly. Together, this approach encompasses the basic skills associated with critical thinking.

In one way, by avoiding the lists of specific skills, the approach adopted here *assumes* that critical thinking is generic: it is a way of thinking that applies in all subject domains. The way questions are asked and the exact content of the questions may well vary from one subject domain to another. Nonetheless, the underpinning nature of critical thinking is conceptualised in generic terms. Looking at the lists of characteristics relating to both skills and dispositions discussed above does suggest that critical thinking is a generic set of skills. There may be idiosyncratic features in different subject domains. However, if critical thinking is conceptualised in terms of productive questioning, this is clearly a generic standpoint.

The questioning being described here is quite specific. It does not involve questioning of factual information or clarifying understandings nor does it involve questions related to procedures to be carried out in class. It is quite possible for a class to involve large numbers of questions but for critical thinking to be absent. The kind of questions (in the context of Functional English) that are a feature of critical thinking are those which question communications, the agenda of communicators, possible biases in interpretations and how interpretations relate to previous understandings.

For this study, critical thinking is conceptualised as:

Purposeful thinking leading to a set of skills (questioning judgments and evaluations, weighing arguments, judging the quality of evidence, evaluating claims and the credibility of sources, being open minded and aware of implicit assumptions, questioning possible interpretations) which involve productive questioning.

In all this, the role of questioning is important: asking questions directed at finding new information, its source, its meaning and potential bias in interpretation. This kind of questioning has been described as ‘productive’ questioning (DiYanni, 2015, p.4). From this way of thinking (DiYanni, 2015, p.109), all kinds of appropriate skills and dispositions can arise. This is illustrated in figure 3.7.

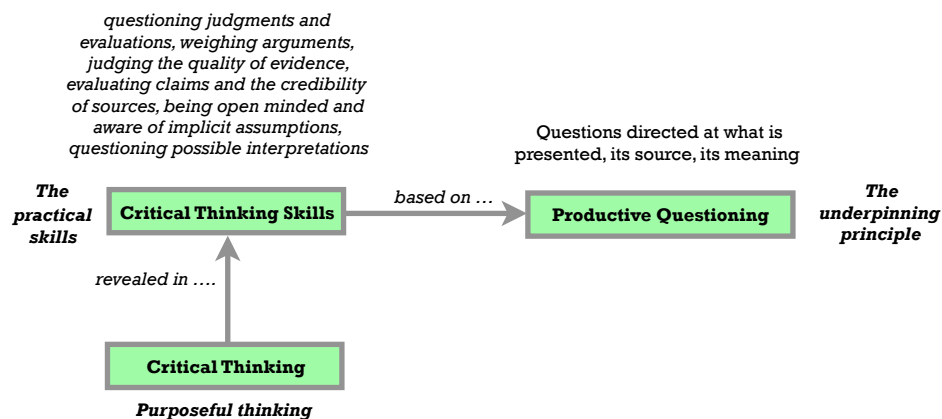


Figure 3.7 The Working Definition of Critical Thinking (conceptualised in this study)

Figure 3.7 seeks to clarify the distinction between purposeful thinking that constitutes critical thinking from observable set of skills that this can generate.

In the context of Functional English in Higher Education in Pakistan, this might mean students developing a questioning attitude where the questions will be directed at what they are reading, potential agendas of the authors, possible sources of reader bias, and whether what they read makes sense in the light of previous understandings. The development of this questioning attitude may come by absorption, following the examples set by teachers and the way the processes of learning are structured. Whether absorption is a better way forward than trying to teach students to think critically, will be discussed later in this chapter. In this, the learners observe their own teachers and, over time, they may subconsciously develop thinking skills modelled on their teachers.

Functional English, by its nature, is dominated by an emphasis on communication skills (HEC, 2012a). However, communication raises major questions about whether what the receiver gains from the communication is what the communicator intended. Did the communicator have an agenda? Did the receiver possess a bias? Was the form of language used the best? Would alternative ways of communicating convey ideas more effectively? These are all outcomes from the development of a way of thinking where the questions are directed appropriately.

Questioning, by its nature, means questions addressed to someone or something. This immediately places the development of critical thinking skills in the context of collaborative learning. Learning is a social activity and the development of the skills of questioning being envisaged in the literature suggests learners working together, helping each other, challenging each other, posing questions at each other or sharing questions to

be directed at what is being presented to them. Some authors (Donato, 2000; Ellis 2000; Wass, Harland and Mercer, 2011) have developed the findings of ideas of Vygotsky and expanded these to encompass areas that involve learning as a social activity and this is discussed in the next section.

3.5 Critical Thinking and Vygotsky

As mentioned above, in this study critical thinking is defined in terms of purposeful thinking leading to a set of skills (questioning judgments and evaluations, weighing arguments, judging the quality of evidence, evaluating claims and the credibility of sources, being open minded and aware of implicit assumptions, questioning possible interpretations) which involve productive questioning. This leads to the issue of how to foster critical thinking? It is reasonable to suggest that students need to be placed in learning situations that give opportunities for questioning in order to develop, ‘the ability to analyze and evaluate information’ (Duron, Limbach and Waugh, 2006, p.160). This kind of questioning will often depend on social interactions in learning situations. This might involve academic settings where a learner has a mentor or facilitator, this person being either a teacher or another learner. This could be extended to students working in groups, which are both collaborative and task oriented.

If critical thinking is conceptualised as purposeful thinking leading to a set of skills which involve questioning, then such skills can be encouraged through social interaction where the learners are given opportunities to practice appropriate questioning. It is at this point that the insights which have been derived from the work of Vygotsky can be helpful. For example, Wass, Harland and Mercer (2011) specifically relate the development of critical thinking with the work of Vygotsky (1978, translated from the original, 1934). They employ two key ideas: scaffolding and the zone of proximal development, arguing that these support the development of critical thinking. The idea of scaffolding was first proposed by Bruner (Wood, Bruner and Ross, 1976). Scaffolding refers to a variety of instructional techniques used to move learners progressively toward stronger understanding and, ultimately, greater independence in the learning process. However, Bruner uses the concept precisely to refer to *‘the steps taken to reduce the degrees of freedom in carrying out some task so that the child can concentrate on the difficult skill she is in the process of acquiring’* (Bruner, 1978 cited in Gibbons, 2002, p.16).

In Vygotsky's original work, the focus is on very young children and Bruner also applied the ideas at that level. The focus of both was on the cognitive development of young children. However, others have extended the ideas into wider learning. Donato (2000) emphasises that learning is a collaborative task where teachers and learners are given opportunities to mediate and assist each other. Such an approach may be very helpful in encouraging students to think critically. Similarly, Schunk (2004) notes that learning and development cannot be dissociated from their context and this includes learners interacting with the world around them, including other learners. However, he notes that understandings gained from social interactions have to be internalised by individual learners. The concept of scaffolding has also been extended widely into many areas of learning (Turuk, 2008).

The idea of scaffolding is very straightforward, with the more experienced person providing support to the less experienced learner, that support being steadily reduced as the less experienced learner makes progress. In a sense, this is the natural process by which parents often guide and support their own children while it is also seen in schools where the teacher offers the support until the learner gains enough experience and skill to move out on their own in some task. Since the work of Vygotsky reached the west, many have extended his ideas into wider learning (eg. Gibbons, 2002; Reiser, 2004). In addition, specifically in the context of second language learning, several have related language learning to the concept of the zone of proximal development (Ellis, 2000; Lantolf, Thorne and Poehner, 2015).

Vygotsky (1978, p.76) refers to, 'the actual developmental level' of a child in terms of what the child can achieve unaided, but he notes that, 'what children can do with the assistance of others might be in some sense even more indicative of their mental development than what they can do alone'. This led him to suggest that there were two positions of development: what the child could do unaided and what the child could do given appropriate support. He was considering child development and found that the difference between the two levels was quite small. Teachers are familiar with this, as Vygotsky notes, and are aware in the wider field of learning that learners can be supported to move forward in what they can achieve but there are limitations.




He describes, 'the zone of proximal development, as determined through problems that children cannot solve independently but only with assistance'. He goes on to speak about

the cognitive functions, ‘that have not yet matured but are in the process of maturation, functions that will mature tomorrow but are currently in an embryonic state’. These developing functions can be drawn out given suitable support. In an interesting turn of phrase, Vygotsky (1978, p. 77) states that, ‘The actual developmental level characterizes mental development retrospectively, while the zone of proximal development characterizes mental development prospectively’.

In the context of critical thinking, it might be suggested that the students are quite capable of critical thought (prospective achievement) but have never had the opportunity to develop the skills (retrospective achievement). Given the appropriate support, there are opportunities for the students to move forward in their thinking. In their past, study has been largely a matter of memorisation and recall. The goal is to move them forward to start to develop the way of thinking known as critical thinking. Perhaps this can be achieved given appropriate support and opportunities to develop the questioning skills that might lead to analysis, evaluation and weighing evidence.

Over the decades, what are known as sociocultural theories have been developed and are often linked back to Vygotsky’s work (Donato, 2000; Ellis 2000; Lantolf, Thorne and Poehner, 2015). These social-cultural theories tend to be more philosophical in nature and not theories in the sense that Vygotsky developed his ideas where he based his work on the review of very extensive observations, approaching his research studies from the perspective of a developmental psychologist. Thus, for example, Vygotsky writes, ‘This difference between twelve and eight, or between nine and eight, is what we call the zone of proximal development. It is the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers’ (Vygotsky, 1978, p.79).

The concept of scaffolding is useful and can be described in terms of three essential features of scaffolding that facilitates learning:

-  To be effective, there has to be interactive collaboration between the learner and the expert for the support to be effective.
-  Vygotsky stresses that learning has to occur within the learner’s zone of proximal development. This means that the more expert person needs to be aware of the learner’s current developmental level while seeking to draw the learner forward to a higher level.
-  The scaffold, which can be seen as the support and guidance provided by the more expert person, should be gradually reduced as the learner becomes more proficient.

The Functional English course has been designed to encourage 'interaction' in order to develop communication skills. The course includes a variety of activities (involving pairs or small groups - to be discussed in the following chapter) providing students with opportunities to think and respond. In the course of thinking, the students are encouraged to talk in dialogue with each other and question in order to evaluate, analyse and weigh options before coming to any conclusions. Overall, the Functional English course can be seen to reflect many of the ideas that have been derived from Vygotsky's earlier work, especially his emphasis on the social nature of learning.

Having discussed the nature of thinking and provided the conceptualisation of critical thinking that is being used in this study as well as considering possible ways by which critical thinking might be developed, the next section reviews a number of studies set in Pakistan which consider critical thinking in Higher Education.

3.6 Setting the Background: Critical Thinking in Pakistan

In looking at the studies that report on the critical thinking in Pakistan, these focus largely on critical thinking in nursing education. However, these studies have made an attempt to highlight the difficulties in describing what critical thinking actually is. The studies merely describe the situation and the problems, without exploring how critical thinking can be developed successfully.

Among the small number of studies, there are three studies undertaken recently which not only argue strongly for the value of critical thinking but also offer useful insights related to the problems that currently exist. Although these studies do not offer any evidence about ways to develop critical thinking, they do pinpoint some of the major issues that will be important if critical thinking is to be developed successfully in Higher Education in Pakistan. In this, they provide an agenda which helps to inform the project currently being undertaken.

Saeed *et al.* (2012) consider critical thinking in the context of nursing studies in Pakistan. They look at critical thinking in terms of the fundamental skill that is involved: asking questions. However, the questioning that is implicit in critical thinking is not an easy skill and such questioning may be difficult to generate when the teacher is not encouraging. The overall educational learning environment in Pakistan is likely to be put into disarray

by effective questioning. This raises the question about how teachers can be trained so that they can develop critical thinking skills in their students, a point also made by Zygmunt and Schaeffer (2006). This is an important issue considering that the present population of university teachers were educated in systems in Pakistan where critical thinking has traditionally held a very low priority. Saeed *et al.* (2012) focussed on nursing education only and did not consider wider implications across other disciplines. However, Cassum *et al.* (2013) widened the scope of his study slightly by referring to medicine and education along with nursing education. It is interesting to note that in both cases the studies focused on vocational disciplines.

Although Cassum *et al.* (2013) considers critical thinking as particularly important in medical areas, almost implying its lower significance elsewhere. They noted the lack of clarity about the nature of critical thinking and the difficulty in developing it when there is little agreement about the goal. They also noted the difficulty associated with the word ‘critical’ as it carries overtones of harsh criticism or negative comment in the native language. In common with most of the literature, they express strong support for the development of critical thinking in Higher Education courses but they do not offer a clear conception of what is meant by critical thinking. They consider it logical to understand critical thinking in Pakistani context particularly the perceptions of critical thinking of educators, in order to develop strategies and motivate educators to facilitate critical thinking in learners. However, given the paucity of studies from Pakistan, they argue for a wider survey in South Asian cultures as well as a wider world context. One important contribution that is derived from this study is their stress on the need for clarity in describing critical thinking that takes account of Pakistan culture.

In fact, the cultural dimension played little part in either of the studies by Saeed *et al.* (2012) or Cassum *et al.* (2013). The study by Manan and Mehmood (2015) filled this gap, at least in part. They have addressed the issue of culture and, specifically, education culture. In Pakistan, the best teacher is often perceived as the person who manages to impose pin-drop silence in the classroom. The ideal students are those who observe silence and remain obedient before their teachers. They also observe the complex nature of the practice of critical thinking in the learning situation which involves student-teacher interactions and student participation. Students need the freedom to ask questions as well

as the opportunities to reason, challenge or, indeed, advance their individual analyses relating to the themes being discussed.

They express agreement with Hatcher and Spencer (2005) who argue for the importance of critical thinking in the context of the work place. They saw the way of thinking as being useful in the process of evaluating people, policy and institutions. They consider that this will avoid social problems. Perhaps Hatcher and Spencer are somewhat over-optimistic. It is easy to see that critical thinking may help in dealing with all kinds of issues that involve thought. Other factors may be important, including economic, political and religious influences.

Manan and Mehmood (2015) note the incisive contributions from Hoodbhoy (2009, p. 592) who, from a background of a long career in nuclear physics in Pakistan, reflects very perceptively on the current state of education in Pakistan:

‘..it is the value system that shapes modern education and a modern mindset built upon critical thinking. The Pakistan’s educational system is shaped by deeply conservative social and cultural values, discouraging questioning and stressing obedience. Progress demands that ultimately the dead hand of tradition be cast aside ... in seeking change of values, it will be important to break the absolute tyranny of the teacher, a relic of pre-modern social values’.

Hoodbhoy (2009, p. 592) considers critical thinking specifically as a vital component in moving Pakistani society forward when he notes that, *‘Critical thought allows individuals to make a revolutionary difference and to invent the future. Else, they will merely repeat the dysfunction of the past’*. His observations are apt. Without critical thought, understandings and practices can never really move forward.

Overall, Manan and Mehmood (2015) bring some of the key ideas together. They note the fact that philosophers, psychologists and educationists do not agree on all points about the nature of critical thinking. However, there is a broad acceptance that critical thinking encompasses a range of cognitive thinking skills as well as the ability and willingness to ask and answer questions relating to what is being given to the students. This confirms the central role of questioning which underpins critical thinking and offers support for the way critical thinking is conceptualised in this thesis.

What we can infer from the very few studies pertaining to critical thinking carried out in a Pakistani context is the lack of clarity in how critical thinking is to be seen. There seems to be a consensus that critical thinking involves questioning. In this, the questioning relates tightly to presented material and its meaning. The other major area relates to how critical

thinking can be developed. In this, the studies discussed above offer very little but they do pinpoint some of the more important areas of hindrance. Figure 3.8 summarises some of the key issues mentioned in these studies and these will be discussed in this chapter.

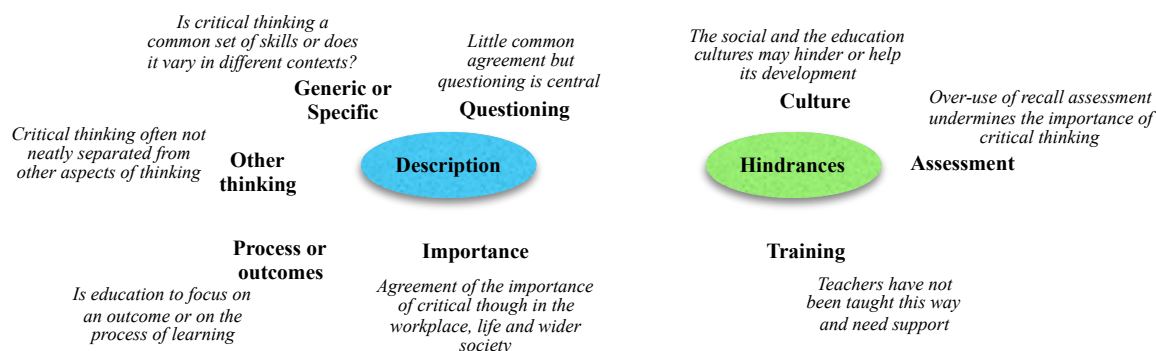


Figure 3.8 The Main Themes to be Reviewed

The following sections of this chapter relate to the perceptions and importance of critical thinking in Higher Education and specifically in the area of Functional English. It will consider the factors that might facilitate or hinder the development of the critical thinking skills in a Pakistani context and try to conceptualise critical thinking in terms of asking appropriate questions. Furthermore, the section will explore as to how this way of thinking might be seen in Higher Education in Pakistan in the Functional English courses.

3.7 Critical Thinking and Graduateness

Policy documents from the Higher Education Commission in Pakistan lay emphasis on the development and importance of critical thinking (HEC, n.d.). One of the objectives of Higher Education is that, when graduates leave the university, they should be good critical thinkers. In most areas, the curriculum is not designed in a way that could create a learning environment in the class which encourages the development of critical thinking. Thus, curriculum goals are typically specified in terms of content to be covered while assessment procedures have tended to reward little more than accurate recall (Ud Din, *et al.*, 2012). However, in the developing modularisation of university courses, there is a much greater scope for assessment to reward a wider range of skills (HEC, 2013). University teachers were themselves educated in a context where critical thinking was rarely emphasised and there is a lack of teacher training. Thus, teachers are often unable to teach in ways that would encourage critical thinking. This leaves university teachers with

no clear conception of what is involved and no practical guidance about the teaching strategies that might encourage the development of critical thinking (Alazzi, 2010).

Paul (1997) explored the state of critical thinking in Higher Education in the United States and noted three rather disturbing findings (p.27):

- '(1) Most college faculty at all levels lack a substantive concept of critical thinking;*
- (2) Most faculty do not realise they lack a substantive concept and instead believe they understand critical thinking sufficiently and are already successfully teaching it within their discipline;*
- (3) Despite 'reform' efforts, lectures, rote memorisation, and (largely ineffective) short-term study strategies are still the norm in college instruction and learning today.'*

Almost two decades later, their description would be accurate if applied to Pakistan: lectures dominate, student questioning is discouraged, assessment rewards rote memorisation. The obstacles in seeking to change the situation in Pakistan are immense.

In recent years, the Higher Education Commission has encouraged universities to move towards a semester system and to consider assessment in the light of the European Credit Transfer Network (HEC, 2013). This approach to assessment has all the potential to widen the goals of assessment well beyond recall and recognition in that the policy document (HEC, 2013) specifies a wide range of goals and introduces continuous assessment as well as formative assessment. However, it is too early to see many changes as yet.

Higher Education has achieved remarkable progress in Pakistan, both in quality and quantity. However, the country has a real problem in developing the Higher Education system to match world patterns, given the resources available. The move to four year degrees and the development of new curricula (such as that pioneered under USAID) are welcome steps. In this, there is a stress on the importance of developing thinking skills among students by encouraging them to make sense of new information and not just memorise knowledge. However, little detail is offered and critical thinking skills are described in a limited way. The impression left is that critical thinking is seen as a kind of anti-dote to excessive memorisation (see chapter 4). Overall, the educational context is not very supportive to the development of critical thinking skills.

Critical thinking should have an important place in Higher Education. However, critical thinking, while extremely important, as a set of cognitive skills, is not an educational panacea. The entire attitudinal dimension also has a major role to play. In simple terms,

students not only need to know *how* to think critically but they also need to know *why* they should think this way: value in terms of their own educational development as well as its value in the context of their understanding of material being studied (Paul, 1992).

It has to be recognised that it is very difficult to develop critical thinking skills at school level. Meyer and Benavot (2013), reflecting in an international perspective, note that the way curricula are constructed and, even more importantly, the way national examinations are set, make it almost impossible for teachers at school levels to fulfil the desirable aims in developing critical thinking skills. In Pakistan, gaining good grades - almost by any means - means that training in memorisation, along with extensive '*cramming*' is very much the norm. In other countries, especially in the Far East, there is an extensive network of after-school teaching, aiming to cram in yet more information and, thus, gain higher grades (Paul and Elder, 2008b). Thus, students entering Higher Education in Pakistan come with experiences from school that stress the importance of memorising, with more or less no scope for interaction with the material or seeking to look at it critically. These constitute potential major barriers.

On the other hand, Higher Education offers an opportunity to move things forward by laying emphasis on critical thought. In addition, teachers in Higher Education enjoy greater freedom compared to school-teachers and there is considerable scope here to encourage critical thought. In schools, teachers do not control the curriculum or textbooks, the assessment or the resource levels. In higher education, teachers have much more freedom over what is taught and how it is taught while assessment is largely within the control of individual universities.

In Pakistan, the motivation of students for entering Higher Education is the idea that a degree opens the door to a better job with better remuneration. However, what is rarely considered is whether the university degree equips them to be successful in their professional lives. The requirements of employers in Pakistan are rarely taken into account when planning many courses, although the more vocationally directed courses (like medicine, dentistry, nursing, engineering etc) are often different. Employers today wish to employ graduates who possess the skills to analyse, assess, evaluate, and take decisions based on sound evidence. All these are related to critical thinking.

The development of critical thinking with students in Higher Education can be seen in the wider context of the skills that are thought to be desirable for graduates to possess. This has been described as ‘*graduateness*’ (Harvey and Green, 1994). In essence, it poses the questions: are graduates different in anyway from those who have not studied in Higher Education? Is any gain for graduates justified in terms of the time and resources spent? Raouf, Ahmad and Qureshi (2009) have reviewed this area, specifically in the context of Quality Assurance in Pakistan Higher Education. He summarises what employers are seeking and what students wish to experience during their degree. He also shows that it is important to look at the process of the undergraduate student learning journey as well as the final ‘*product*’ (the graduate).

Pukelis *et al.* (2007 cited in Gunn *et al.* 2010) argue for the role of higher education in equipping students to move smoothly into professional life and society while Barrie (2007) has argued that the development of attributes for their role in work and society is vital. Both see this in terms of students being given opportunities to experience work-related learning which might enable students to see how their studies relate to the wider needs and of society. Bowden *et al.* (2000 cited in Barrie, 2007) see this in terms of developing attributes that will enable graduates to be agents of social good in an unknown future.

Studies (Barrie, 2004, 2006, 2007) have shown that university academics can share widely diverse views of what such attributes actually involve. While some academic staff do see the role of the university in developing skills already present in learners, most look beyond this to consider additional general functional abilities and personal skills that can usefully complement the discipline specific learning outcomes of a university education. For many, the emphasis is on the generic skills while others focus on ways of thinking that may be of great importance in the world of work beyond the university. This diversity of views is in some ways inevitable in that different degree courses can have very different relationships to the workplace, with some being highly vocational (like medicine), others broadly vocational (like engineering and many of the sciences), while others link to no specific workplace opportunities in such neat ways. However, graduate attributes have been broadly conceptualised in terms of shared generic skills, including ‘critical thinking; written and oral communication; teamwork; problem-solving; managing; and organising’ (McIlveen, *et al.* 2008, p. 2).

The studies by Harvey (Harvey and Green, 1994; Harvey, 1997) show that employers in the UK want students who can bring knowledge and ideas to their organisation, who show willingness to learn and who possess flexibility, adaptability and ability to deal with change. However, they also want to employ graduates who possess logical, analytical and critical thinking skills and can bring these to bear on situations where change and development are possible. These findings are equally applicable in Pakistan (Raouf, Ahmad and Qureshi, 2009). Overall, employers wanted graduates who would add something to their organisation. However, employers held in the highest esteem what they called *transformative skills* - the ability to take an organisation forward in new and effective ways. The development of critical thinking skills clearly has a place here in that such a way of thinking will tend to challenge what is happening and look for alternatives. While employers were not very interested in the subject matter taught in degree courses, one study revealed that students wished that the content had been taught in *different* ways to allow more generic skills to develop (Hanson and Overton, 2010). This gives a pointer to possible ways for the development of critical thinking skills.

Bringing all these findings together suggests that there are fundamental questions regarding the role of critical thinking in Higher Education in Pakistan:

- (a) Do the students have any experience of thinking critically that they bring from school or wider life?
- (b) Do the university students have the intellectual capacity to be able to learn how to think critically?
- (c) What kind of teaching approach is best suited to encourage the skills of critical thinking?
- (d) Specifically, is critical thinking best taught as a separate course or is it best to become an integral part of subject teaching and learning?

Regarding question (a) it can be said that encouraging the skills of critical thinking is unlikely to feature at the moment in most schools and colleges in Pakistan where teaching and learning heavily emphasise the transfer of knowledge from the teacher to the learner. In looking at question (b), the work of Al-Osaimi *et al.* (2015) suggest no major issues here. Looking at question (c), the literature offers little specific about ways to develop the skills although group work, with challenges to questions, was the way employed by Al-Osaimi *et al.* (2015). The issues about separate courses or integrated teaching will be discussed later (question d).

In simple terms, there is no obvious reason why critical thinking cannot be developed with university students despite their little or no experience with critical thinking at school level.

3.8 Critical Thinking and English Language

In Pakistan, the goal of teaching English is to make students able to be proficient in language communication and study in English. English, being an international language, has tremendous importance in teaching and learning. Indeed, in Pakistan, the learning of English is a vital skill simply because much of the literature in many subject disciplines is written in English.

Rafi (2011) expresses the view that learning a second language is of high significance for wider reasons. He is very optimistic in asserting that language learning allows learners a degree of independence in developing their thinking but he also notes that critical thinking can make their learning more meaningful. He holds the view that critical thinking correlates highly with learner achievement. However, this can only be true if the assessment of that achievement rewards critical thinking.

It has to be noted that these may be expressions of aspiration although a number of authors claim that critical thinking does correlate with performance [language proficiency (Liaw, 2007); oral communication ability (Kusaka and Robertson, 2006)]. Of course, correlation does not imply causation. However, the very encouragement to think critically may have all kinds of benefits. For example, simply thinking critically about subject material may assist understanding.

Many have emphasised the importance of developing higher-order thinking skills (perhaps reflecting Bloom, 1956) in foreign language classrooms (Chamot, 1995; Tarvin and Al-Arishi, 1991 cited in Liaw, 2007) and empirical evidence supports the effectiveness of teaching critical thinking skills along with the foreign language (Chapple and Curtis, 2000; Davidson, 1994, 1995). Mahyuddin *et al.* (2004) argue for numerous benefits from the development of thinking skills in the context of language learning. These include the capability to think both critically and creatively, being able to take decisions and solve problems, critical skills in understanding language as well as skills related to life-long learning. Although set in the context of the Malaysian vision for education for 2020, the aspirations are of much wider significance.

Kabilan (2000) argues that simply emphasising the use of language as a communication tool is not sufficient in helping students to become proficient in the target language. He suggests that for learners to be proficient in a language, they need to be able to think creatively and critically when using the target language. However, Pica (2000) notes that, in the tradition of English language teaching methodology, the integration of language and thinking skills has been peripheral.

Many of the claims in the papers cited above are from those who are committed to the teaching of language. Their viewpoints are almost certainly coloured by the more utilitarian aims that many express in relation to language learning. They may well be seeking to justify language learning in terms of giving opportunities to develop wider skills, including critical thinking skills.

Typical of this, Brown (2004) holds the view that language programmes should go beyond linguistic objectives to encompass the development of critical thinking among learners. Earlier, Widdowson (1990) stressed the effectiveness of language teaching depending upon things that are taught which learners perceive as a purposeful and relevant extensions of their horizons, in addition to the formal language learning. This appreciates that language is a tool in any culture, and is integral to the expression of that culture. However, in Pakistan, students undertake Functional English courses in order to learn and enhance their skills in communication. The language is also important in their studies in other disciplines. Their agenda is tightly focussed and they may only appreciate wider skills if they perceive the wider skills as enhancing the communication element.

All this reflects some key issues for Pakistan. Functional English courses are perceived to have as their prime goal the development of communication skills and ability to study in English. Even if critical and creative thought are perceived to enhance communication goals, emphasising such skills will still only occur if the teachers are aware of it and trained to bring about such developments. On a more positive note, Bernasconi (2008) focusses specifically on the English classroom and argues that this offers a unique environment to learn and to practice critical thinking skills: *'learning how to read rhetorically, to think critically, and to write authoritatively, possess a serendipitous value, one well beyond the academic world'* (p.19). In all this, it is important to recognise that critical thinking is only one part of the complex process known as thinking. The goal of education is learning and learning is perhaps best conceptualised as a process of *meaning-*

making where new understandings are incorporated into what is already understood (Day *et al.* 2007). If meaning-making is the goal, this almost implies an element of critical thinking is needed.

Critical thinking inevitably depends on the use of language and the concepts captured by specific words and phrases. Thus, Ruff (2005, citing Bluedorn and Bluedorn, 2003), considers the role of language as fundamental while Case and Daniels (2004) argue that the concepts behind words like argument, validity, credibility, truth, soundness, induction, deduction, and various informal fallacies depend on a grasp of language and ideas.

Earlier in this thesis, from the literature, it has been established that:

- Critical thinking is more than a set of skills. It involves a willingness to think critically and that may depend on whether the student sees any value in thinking critically.
- Critical thinking fundamentally involves asking questions but these questions need to be of a specific nature: the questions focus on what is being presented, its source and meaning and the significance of what is taught in the light of what is already understood.
- Critical thinking is often associated with the idea of making judgements - that implies asking the right questions and then drawing legitimate conclusions.
- Words and phrases like reflection, analysis, evaluation, weighing arguments often appear in different definitions of critical thinking.

This offers a way forward to seeking to develop a clear definition which is meaningful to teachers and learners in the context of Functional English in Higher Education. Students need to be encouraged to question what they are reading or hearing, to question the agenda of the author(s), to question what meaning is intended and whether it is valid as well as questioning their own ability to avoid bias in interpretation. Given the teacher-centred paradigm that tends to dominate learning in higher education in Pakistan, the development of critical thinking may not be easy for opportunities to question are rare. However, in Pakistan, in the teaching of Functional English in Higher Education, it can be argued (HEC, 2012a; NEP, 2009) that the development of critical thinking may well depend on:

- The teacher's role being re-conceptualised from knowledge dispenser to that of learning manager;
- Being aware that students entering higher education have no experience of critical thinking from school;
- Being aware that examinations need radical overhaul so that evidence of critical thinking is rewarded;
- Developing sets of group work tasks which allow for the kind of question that is essential in critical thinking;

- Develop a questioning attitude in all lecture-type presentations, the questions being directed at the material being presented, its authorship, and how meaning is to be gained (with awareness of potential bias).

The education culture in Pakistan is Asian overlaid by Islamic culture and this cultural mix is an important factor in planning any success on developing critical thinking skills in the teaching of Functional English. It might be argued that Western culture encourages critical thinking. The Delphi study had concluded that the teaching of subjects in such a way that critical thinking is encouraged was a feature ranked as ‘*very highly recommended*’ for ALL education. While this is to be supported, the emphasis in this study is on Functional English courses in the pre-existing conditions of Pakistan.

In his revealing book, Ng (2001) identifies some features of Asian culture that can help explain why passive education is so deeply entrenched. In the context of Asian culture, he argues that, in the west, there is a tendency towards individualism (which can offer a freedom to question) while, in the East, group identity has a higher profile (which can often discourage question and challenge). Thus, an Asian person tends to be “*psychologically dependent on the ingroup, and conforms to it instead of following the wishes and desires of his own heart*” (p.27). There is an emphasis on social order and harmony and this is strongly related to the upholding of group social rules and norms. Pakistan tends to have the same cultural outlook. Children are raised at home in an atmosphere where there is obedience to elders and they adopt the same behaviour with their teachers in the classroom. Specifically, they consider it disrespectful to question teachers.

Overall, conformity is a strong feature in such cultures although the nature of that conformity can be quite diverse. In such cultures, critical thinking may not feature highly within education although, yet again, there is wide diversity. Ng (2001, pp.56, 87) argues that the emphasis on obedience and conformity to group expectations, together with the avoidance of losing face, makes creative and critical thinking more difficult. In an educational setting, the teacher is seen as the source of knowledge, not to be questioned. The role of the student is seen as that of absorbing as much knowledge as possible in unit time. Manan and Mehmood (2015) also noted that questioning is not encouraged and, conformity is part of Pakistani educational culture.

Masduqi (2011) notes that, for Asian students, there are several problems associated with learning English. First there is the actual learning of the language, its structure and how to use it to communicate. On top of that, the idea of looking at a text and seeing it not as some kind of authority statement beyond any possibility of contradiction. Add to that the traditional teacher-centred lecture approach where the teacher is perceived to be beyond contradiction. Bringing all this together makes the development of critical thinking an almost impossible outcome.

Experience shows that it is sometimes bewildering for Pakistani students to distinguish between debatable and non-debatable statements. They also have difficulty in identifying the standpoint of the writer, considering it critically, and considering alternative standpoints. Writers are authority figures and rebuttal of an argument is, therefore, not easy.

Several layers of cultural problems can be seen in the development of critical thinking in relation to English language learning. In learning English in Pakistan, the emphasis is mostly on being able to use the English to communicate, largely following a rote learning paradigm. Knowing English is an essential '*tool*' in studying other disciplines where much literature is English-based. There is a strong learner-centredness in that the individual needs the tools of the language to make sense of some other discipline. Thinking critically is not in the frame of reference, it is not in the culture and it is usually not in the methods used by English teachers. Richards and Rodgers (2001) argue that language teaching in a communicative approach-based class should be learner-centred and responsive to the needs and interests of the students. This method may be very appropriate in a Western setting but is not so easy in Pakistan where there is often an acquiescent style of learning where it seems inappropriate to question teachers or to challenge ideas (Masduqi, 2011).

It has to be recognised that the educational cultural setting in Pakistan poses considerable obstacles in developing critical thought. Challenging that culture may be extremely difficult. This leads on to a consideration of the potential barriers and facilitators that will be important in the development of critical thinking, the theme of the following section.

3.9 Facilitators and Barriers in Developing Critical Thinking Skills

In this section an attempt has been made to summarise the facilitators and barriers identified in the literature and their implications for Functional English courses in Higher

Education in Pakistan. Various studies (Lipman, 2003; Mangena and Chabeli, 2005; Aliakbari and Sadeghdaghighi, 2012; Cassum *et al.*, 2013; Saeed *et al.*, 2012; and Manan and Mehmood, 2015) have noted that it helps to identify facilitators and barriers in order to promote a culture of critical thinking in Pakistan Higher Education classrooms and they express pessimism that critical thinking strategies will be developed easily.

The following discussion looks at the key features of the papers. Following interviews with 12 university teachers, Cassum *et al.*, (2013) identified four broad areas in Pakistani context (p.61) which had important implications in enabling or hindering the development of critical thinking:

- (1) Teacher Competence
- (2) Nature of Students
- (3) Type of Learning Environment
- (4) Organisational Ethos and Resources

In looking at their study, it can be argued that the perceptions of respondents about critical thinking may have been somewhat different from the concepts discussed in sections 3.3 and 3.4, nonetheless, the four areas identified in the study are a helpful way to look at the potential factors which might enable or hinder the development of critical thinking. Each is discussed in turn.

3.9.1 Teacher Competence

In their discussion on teacher competence Cassum *et al.* (2013) are not implying some kind of teacher incompetence. The respondents in their study when asked about the facilitators and deterrents of critical thinking spoke of a lack of background knowledge and attitudes related to what critical thinking is and how to teach it in a setting where the '*majority of institutions in Pakistan still promote rote learning....*' (p.61). They note that the respondents see questioning as the principle underpinning critical thinking and they described these as 'effective questioning skills' which see questioning as 'an important element of deeper inquiry' (p.61). However, Cassum *et al.* (2013) are aware that questions need to be 'effective' but 'unthreatening' (they refer to asking 'a question threatens the learner and acts as deterrent to CT' [p.61]). They also argued for what they called '*active learning strategies*' (p 61) but it is more likely that these are seen as a way to reduce the dependence on rote learning.

Specifically in teaching languages, Lipman (2003) sees the teacher's role as vital, arguing that the language teacher is responsible for developing critical thinking as part of wider educational development. This is somewhat idealistic in that teachers are unlikely to develop critical thinking skills if these skills are not an integral part of their own way of thinking and they perceive that these skills will bring benefit to students. Teachers in Pakistan have been educated themselves in a system which rewards recall and recognition and rarely, if ever, has emphasised skills like critical thinking, it is unlikely that Lipman's encouragement will make much impact. In a sense, Mahyuddin *et al.* (2004) are admitting that when they note that language teachers have a long way to go in seeking to incorporate thinking skills into their curricula.

It is important that the teachers see that students can contribute to their own learning: the teacher is not the sole source of knowledge. Tsui (2001) has noted after a thorough investigation that students are quite capable of high levels of intellectual thought but the teacher needs to release them by allowing intellectual creativity and experimentation in the classroom. Traditional teaching tends to see education as the transfer of knowledge from the 'expert' to the 'novice'. If critical thinking is to flourish, students need encouragement to question and challenge, indeed in some areas to disagree with each other or with the teacher. In all of this, the student is being encouraged to question in such a way that understandings and insights are being challenged on the basis of evidence (Clark and Biddle, 1993). This is consistent with the findings of Pascarella and Terenzini (2003) where socialising with peers and discussing current issues outside of class are important. This moves education beyond teacher-dispensed knowledge in lectures to the possibility of student interactions as they question, challenge and debate.

To achieve this, teachers can employ classroom discussions and group work. Xu (2011) sees group discussion as a means of facilitating critical thinking. There are numerous potential benefits from this kind of learning but a key is that the teacher has to set up problem situations which give a tight focus to what is to be undertaken. Tsui (2002) argues that classroom discussion is more effective when the goal is to develop higher order thinking (eg. critical thinking, problem solving). However, for an effective classroom discussion, both teaching staff and students need to make considerable efforts. This will not be easy in Pakistan: providing opportunity to every student to speak their mind is a rare practice in Pakistani institutions and runs against the cultural norms.

Many writers in the United States (Astleitner, 2002; Half and Reybold, 2005; Tsui, 2006) express surprise that, given that most in Higher Education agree that the development of critical thinking has high priority, there is almost nothing in the literature that discusses direct instructional practice for promoting critical thinking. They note the lack of proper training in seeking to integrate critical thinking into teaching practice. Tsui (2006) considers that more needs to be learned about how critical thinking is actually developed with students. In addition, Burbach *et al.* (2004) and Costa and Kallick (2009) agree with Tsui (2006) that few university teachers have been given any training.

3.9.2 Nature of Students

Cassum *et al.* (2013) found that teachers were well aware of the way teaching and learning are conceptualised at school level. This was seen as generating a context where students did not take learning seriously because the goal of many students was recording information dispensed by the teacher and memorising it. Thus, time spent in thinking, discussing or challenging was perhaps not valued. Interestingly, in the Cassum *et al.* study the fear of Pakistan teachers losing control, with student indiscipline, was evident in the responses, making teachers somewhat insecure in opening up their teaching to critical thinking.

One area where developments may be possible lies in collaborative or cooperative learning. This features highly in many courses in Higher Education today although its use in Pakistan is relatively rare. Students need to form a learning community where they work in groups to solve problems, discuss key issues, identify important questions. In fact, the nature of the question may be central when considering critical thinking. The questions need to be directed at the new information being taught, its source, potential learner bias and how what is new fits with what is already understood. Much interesting work was pioneered by Percival in the 1970s where he set up structured tasks, where students worked in groups to tackle issues based on real-life problems some of them quite complex (Johnstone *et al.*, 1981). Interestingly, he set clear objectives for each unit of material and many of these reflect critical ways of thinking (he uses phrases like analysing data, weighing evidence, looking at alternative interpretations). His approach has been copied widely and there are excellent examples in higher education of what is now known as unitised materials being currently employed mainly in the sciences, technologies and social sciences. Byrne was the first to see critical thinking as an overt goal in such

approaches (Byrne and Johnstone, 1983) while the approach has been widely used in medicine (Mackenzie *et al.*, 2003) and biology (Clarkeburn, Downie and Reid, 2000). The possibilities in English learning seem also to be considerable. It is worth noting that, in the one study where a test of critical thinking skills was used, Al-Osaimi *et al.*, (2015), working with adolescents in Saudi Arabia, employed such highly structured questioning in written form in peer groupings as a major tool. This revealed considerable growth of the skills over time.

This offers considerable scope in the context of learning English in Higher Education in Pakistan. The possibility of encouraging appropriate questioning, working in small groups, and moving the paradigm from teacher-centred information provision to student engagement with the issues are all possible ways forward. However, there remain two other areas of potential difficulty. This may be possible in a Functional English course but it may be inconsistent with other courses undertaken by the students. In addition, it is important that the assessment of the Functional English course reflects this new emphasis.

In a meta-analysis of eight studies from 1991 to 2000, Gellin (2003) concluded that college students who engaged in activities such as interacting with faculty and peers, living on campus, and participating in college clubs or organisations increased their measured critical thinking skills as compared to college students who did not participate in such activities.

It is here that the longitudinal work of Perry (1999) stands out. Although not specifically directed at critical thinking, he tracked the development of student thinking throughout a degree. Perry's findings showed very clearly that the ability and willingness to think critically are key features of the intellectual development of students. The Perry model is now widely used in Higher Education (Ramsden, 2003; Laurillard, 2012; Boyer, 2014) and numerous simplifications and applications now exist, a widely used one being shown in table 3.4.

	Student A	Student B	Student C
<i>Student's Role</i>	Passive receiver. Acceptor of what the teachers say.	Realizes that some responsibility rests with the student. But what? And how?	See student as source of knowledge or is confident of finding it. Debater, Making own decisions.
<i>Teacher's Role</i>	Authority giving of facts and know-how.	Authority. Where there are controversies, wants guidance as to which the lecturer favours.	Authority among authorities. Values views of peers. Teacher as facilitator.
<i>View of Knowledge</i>	Factual; black and white. Clear objectives; non-controversial; Exceptions unwelcome.	Admits 'black-and-white' approach not always appropriate. Feels insecure in the uncertainties this creates.	Wants to explore context. Seeks interconnections. Enjoys creativity and scholarly work.
<i>View of Exams</i>	Regurgitation of 'facts'. Exams are objective. Hard work will be rewarded.	Quantity is more important than quality. Wants to demonstrate maximum knowledge.	Quality is more important than quantity. Wants room to express own ideas and views.

**Table 3.3 Johnstone's Simplification of Perry's Scheme
(from Johnstone, 1998¹)**

Clearly, the students described under the column '*Student A*' are not exhibiting critical thinking. However, critical thinking seems to start to occur with student B and is probably more complete with student C (Warhurst, 2001). Often, students can revert slightly to a lower level of thought in the final year of the degree, perhaps the pressure of the final examinations changing student perceptions slightly (Clarkeburn, Downie and Reid, 2000).

Overall, if critical thinking is to be developed during a degree, it has been shown (see figure 3.3) that two conditions must be fulfilled (figure 3.9).

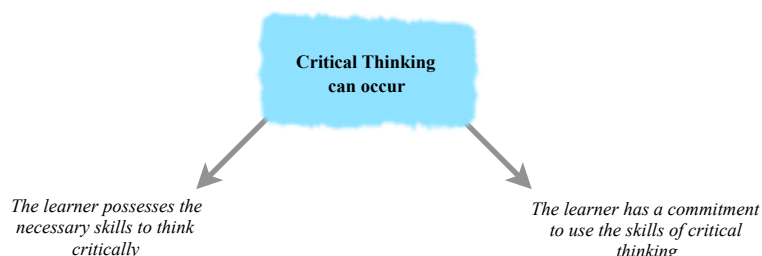


Figure 3.9 Two conditions for critical thinking

This raises the issue of methods that might prove fruitful in developing critical thinking skills in Pakistan Higher Education and this will be discussed in the following section.

¹ This was based on the first edition of Perry's work (1970) but Perry's analysis did not change substantially in the second edition (1999)

3.9.3 Type of Learning Environment

Cassum *et al* (2013) found that teachers were well aware of the vital role of sound student-teacher relationships. There needed to be an environment in the teaching room that allowed students to be engaged, without loss of control. Trust was identified as a key feature, with the students trusting the teacher while the teacher was able to be sensitive to assess student needs and aspirations.

In considering the relationship of the curriculum with wider life, Senechal (2010) perceptively notes the near double lives of students in the United States. There is a world of the internet, social-networking and electronic gadgets, instant communication, the virtual reality of television, video and games. What goes on in learning seems unrelated to all of this. Curricula are centrally imposed, often by those with little direct experience of teaching or learning and what is taught and assessed seems unrelated to student life. However, in a world of instant access to knowledge of any kind, teaching criticality is increasingly important (Senechal, 2010). Similarly, Bernasconi (2008) observes that today's learners often resort to memorisable summaries and the absorbing of bits and pieces that are likely to lead to successful responses to objective test items. The idea of being able to '*wrestle with a text and think profoundly about what it offers*' is a foreign notion (p.17).

3.9.4 Organisational Ethos and Resources

Cassum *et al.* (2013) found that the teachers were aware of the need for a supportive educational culture where the goals to develop critical thinking were shared across the entire institution. The teachers were also aware of the disconnect with school practices, with '*the school's curriculum system and evaluation policies*' acting '*as the biggest challenge to critical thinking in contemporary education*' (p.61). The teachers also argued that their workload was excessive, with lack of time and opportunity to develop strategies to develop critical thinking. However, time and workload are often raised as factors hindering change. The teachers also complained about the inadequacy of physical and electronic resources available. This may reflect a wider unease and the interviews conducted in the study may simply have given an opportunity for frustrations to be vented.

There are also key organisational factors that have to be aligned e.g. institutional culture, values, programme goals, curriculum and assessment policies. In this, university policies

and the way they are managed are critical. In simple terms, while the aspirational teacher can achieve much, their work is limited, and perhaps often undone, if the environment is not conducive. In other words, everyone needs to share the importance of developing critical thinking (Cassum *et al*, 2013).

Other factors that might help or hinder the development of critical thinking are discussed in the following sections.

3.9.5 Content Driven Curricula

One of the greatest barriers relates to the limitations of time in highly pressurised content-driven courses. However, the time dimension raises the issue that if it is possible at all to bring about radical changes (in terms of developing critical thinking skills) within a short time-span as Halpern (2014) has argued in the US context that the content-driven nature of many Higher Education courses hinders the development of critical thinking skills. This often arises with overloaded curricula (Chaffee, 1992; Reed and Kromrey, 2001). Illustrating this, Paul, Elder and Bartell (1997) found that, while the majority of faculty (89%) believed that critical thinking should be a primary goal in Higher Education, more than 75% could not conceive how to cover their course content while fostering critical thinking. It would be interesting to see to what extent things have changed since 1998. It is unlikely that the situation in western countries is as bad today, given the way course outlines are set in terms of objectives, many of which overtly identify thinking skills (HEC, 2013). The general thrust is consistent with the view of Costa (2003) who argues that *‘the content becomes the vehicle for thinking’* (p. 59).

3.9.6 Assessment Criteria

Although it will be an up-hill task, the guidelines of the European Credit Transfer and Accumulation System (HEC, 2012b) offer useful ways forward to develop methods to assess critical thinking skills in the context of learning Functional English in Higher Education in Pakistan. It is quite straightforward to allocate a small proportion of marks for essays, assignments, projects and oral presentations for *‘evidence of critical thought’* (HEC, 2012b).

However, as long as assessment is limited in concept to formal written examinations, based primarily on the recall of information, it is unlikely that critical thinking will be

rewarded and, as a result, it will be hard to make the development of critical thinking skills important in Pakistan Higher Education courses. The introduction of semesterisation, with concomitant changes to assessment thinking (assessment is specified to cover wider goals), may assist but this will take time. One major problem at the moment in Pakistan is the predominant and pervasive practice in university assessment which is often built around the awards of grades based on testing in formal examinations and, therefore, much assessment is relatively high stakes in nature in that the future of students depends heavily on end-of-course assessments. In the context of the United States, Duplass and Ziedler (2002) argue for the use of alternative assessment methods, moving assessment away from the testing of recall/recognition towards rewarding evidence related to thinking and reasoning.

Assessment practices mainly influence learning by directing the objectives the learners set for themselves in learning the foreign language. If the assessment focuses on linguistic competence, mastery of linguistic competence becomes the learner's objective while, if communicative competence is the main focus, learners do their best to become communicatively competent. In the same way, if the focus of assessment is on integrating language and thinking skills, the learners do their best to achieve this objective. In fact, when the purpose of teaching is understanding, the process of assessment, in addition to evaluation, is a substantive contribution to learning. Assessment that fosters understanding needs to inform students and teachers about both what students currently understand and how to proceed with subsequent teaching and learning.

3.9.7 Lack of Encouragement for Questioning

Manan and Mehmood (2015) noted that the tendency in Pakistani culture is not to encourage questioning. Little attempt is made to show how knowledge and understandings have developed over time. There is little about how it applies in life. Thein, Oldakowski, and Sloan (2010) argue that today's learners will live in a global economy and need to see how their understandings are to be set in the wider context of other cultures and settings. Critical thinking skills may have an important part to play here.

Şeker and K.mür (2008, p.12) argue that questions equip the student to negotiate meaning by means of interaction with others in '*meaningful, thought-provocative discussions and activities*'. Arguably, in order to negotiate meaning, students need to develop competence

in communication. Such competence may well develop as a result of the interactions arising from asking appropriate questions. Thus, the in-class questioning activities of language students, exemplified and encouraged by their teachers, may well be central in considering the development of critical thinking skills.

3.9.8 Facilitators and Barriers: The Overall Picture

In an interesting review with a strong United States perspective, Buskist and Irons (2008) have listed numerous reasons why teachers and students feel reluctant to engage in critical thinking. For students, five areas stand out (figure 3.10):

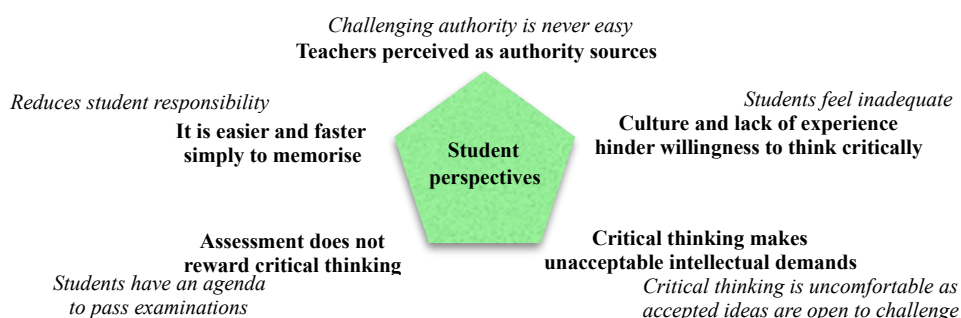


Figure 3.10 Problems for Students (from Buskist and Irons, 2008)

These will not be easy hurdles to overcome. In Pakistani culture, teachers are very much authority figures while assessment is dominated by recall. The latter could be resolved by appropriate decisions taken at institution level but the former is much more difficult to resolve. It will take time and the development of trust between teachers and students. For teachers, five areas again stand out (figure 3.11):

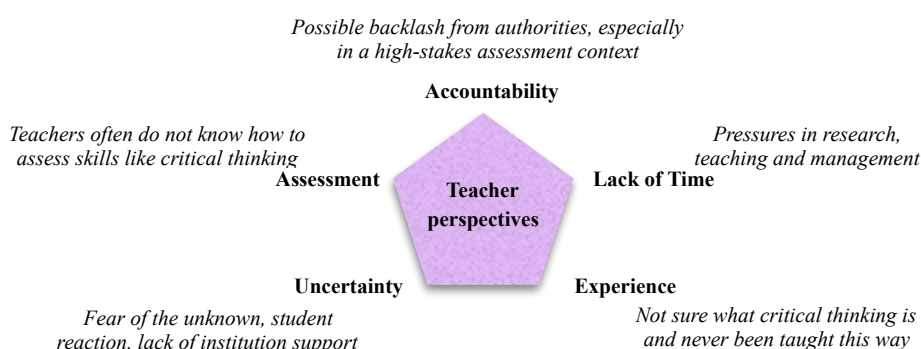


Figure 3.11 Problems for Teachers (from Buskist and Irons, 2008)

In many ways, the review of Buskist and Irons (2008) paints a similar picture to the findings of Cassum *et al.* (2013) although the latter study identifies greater resource problems and a stronger cultural dimension in a Pakistani context.

Looking at the literature overall, some key issues for Pakistan can be identified (Saeed *et al.*, 2012; Cassum *et al.*, 2013; Manan and Mehmood, 2015). Institutions of Higher Education need to develop cohesive educational guidelines that place skills like critical thinking as important in all learning and all assessment. Here, the recent policy documents of the Higher Education Commission (HEC, n.d.) can be helpful. University teachers need to feel supported and affirmed at departmental and faculty levels, an issue for departmental heads and deans. However, there is also a need for training and support for university teachers, offering suggested ways by which critical thinking skills can be developed, related to specific courses. There is also a need to give a consistent cultural message to encourage students to move towards freedom and responsibility in their learning where they are encouraged and supported to think critically: this needs consistent input at all levels in a university.

Having identified the key features that may facilitate or hinder the development of critical thinking, it is now possible to look at the issues that may be important in the practical ways by which critical thinking can be developed with students, especially students in Pakistan.

3.9.9 Facilitators and Barriers: Ways to Make Progress

Overall, there are three viewpoints concerning the teaching of critical thinking (Gutamy, 2001, Al Heela, 2002; Ghanem, 2004). This is summarised in figure 3.12.

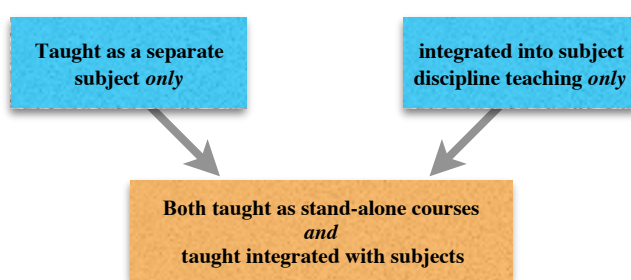


Figure 3.12 Ways of Teaching Critical Thinking

In some ways, the approach depends on how critical thinking skills are to be seen: linked to separated subjects (domain-specific) or generic. Kong (2005) notes that the controversy is largely based on opinion, sometimes related to what specific writers have found works for them.

However, the overall evidence (eg. Solon, 2003) does suggest that the approach where critical thinking skills are exemplified and encouraged by the teacher has worked well

within subject disciplines. This has sometimes been described as an '*infusion approach*' (Solon, 2003, p.36): in this, the way of teaching illustrates critical thought as well as providing opportunities for students to engage in this type of thinking. However, it may be that the way critical thinking is integrated (or infused) is critical rather than the approach overall.

The ideal would seem to be that all subject areas are taught in such a way that critical thinking skills are encouraged but this does not guarantee that the skills will be used in wider life (Facione, 1990; Ennis, 1997). Nonetheless, Tishman, Jay and Perkins (2001) suggest that encouraging and rewarding critical thinking in an educational setting is a start and may lead to wider application of the skills.

Buskist and Irons (2008) make five suggestions to offer opportunities for critical thinking to be developed (summarised in figure 3.13):

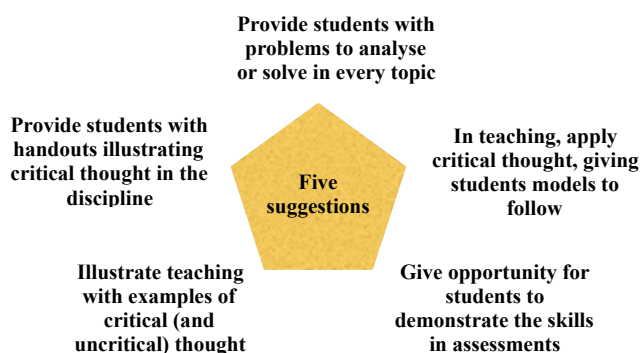


Figure 3.13 Five Practical Suggestions (based on Buskist and Irons, 2008)

These suggestions are realistic and practical and could be widely applied, with flexibility, across any discipline. Interpreting these five suggestions in the context of English learning suggests that:

- (1) Literary topics or themes need to be identified where there is good scope for the development of appropriate questions that underpin critical thought;
- (2) Lecturers need to exemplify critical thinking in every presentation where they give clear patterns of asking question about what is presented, its source and how it fits with previous understandings, with awareness of potential bias;
- (3) Lecturers need to illustrate how critical thinking has brought great value by using examples of critical thought and expression from the literature;
- (4) Generate handouts which demonstrate the same skills of asking critical questions, thus offering a template for thinking;
- (5) Start to re-think assessment so that evidence of critical thought is rewarded. For example, in every piece of submitted work, a small proportion of the marks can be allocated for such evidence, the criteria being used being agreed across teachers *and* shared with students.

This review of the literature on facilitators and barriers in developing critical thinking also offers a good agenda for action in Pakistan where, in the teaching and learning of Functional English, the best way forward may well depend on teachers exemplifying critical thought in the way they teach as well as overtly encouraging appropriate questions. There is a need for students to be able to engage in activities which offer opportunities for questioning. The students also need to perceive value in the skills by credit being given, perhaps in essays, projects and oral presentations, for evidence of critical thinking.

3.10 Conclusions

While there is almost universal agreement that the development of critical thinking skills is a very important element in all higher education, there is a lack of clarity about what is meant by the phrase '*critical thinking*' (e.g. Paul and Elder, 2008a; Coughlin, 2010; Senechal, 2010). The Delphi definition (Facione, 1990) is widely accepted but it is not an operational description. However, almost all later studies have followed this approach, the one exception being Al-Osaimi *et al.* (2014) which offers an operational description (see figure 3.5). The problem with the Delphi definition is that it is not sufficiently precise to guide the development of critical thinking and it does not offer a clear structure which will give direction for assessment (Half and Reybold, 2005; Tsui, 2006).

The more useful way forward is to appreciate the key role of questioning which underpins critical thinking (Saeed *et al.*, 2013). However, the questions need to be tightly focussed so that they challenge what is being taught, the source of the material, the potential bias of the learner, and how the new information relates to what is already understood. Part of the problem relates to the pattern in many publications of providing lists of attributes that might make up critical thinking. The question is whether critical thinking can be adequately described this way or is better seen as a way of thinking. The latter approach is more helpful in that it encourages the more holistic approach, sees critical thinking as a generic skill, based on the concept of appropriate questioning (Manan and Mehmood, 2015). Thus, it is more useful to see critical thinking as a process of thought which is essentially generic. This approach offers practical guidance for teachers in higher education, not only in relation to teaching and learning but also in assessment. It has the added advantage that different subject domains can express their evidence of critical thinking in diverse ways while still all being based on the principle of directed questioning.

In the context of Functional English courses in higher education in Pakistan, almost nothing has been written. Looking at critical thinking in higher education in Pakistan, the studies discuss the nature of critical thinking and its importance, mainly in nursing education. However, these studies do emphasise the importance of developing critical thinking at school level and suggest possible ways by which critical thinking might be developed in these courses (Saeed *et al.*, 2012; Cassum *et al.*, 2013; Manan and Mehmood, 2015).

Publications more or less universally argue for the importance of developing critical thinking skill in higher education courses. However, while university teachers widely agree on the importance of critical thinking skills, much of this relates to the strong evidence that employers value such skills highly with graduates in the work place. Few university courses in Pakistan, which are usually developed without input from the wider work-place, specify critical thinking as an outcome.

There are many studies which look at the barriers which hinder the development of critical thinking skills in higher education courses while quite a number identify features of courses that might facilitate critical thinking. However, in Pakistan, lectures dominate, questioning is discouraged, assessment rewards rote memorisation, while most courses are specified in terms of content (often based on a text book) and are conceptualised as teacher-centred rather than student-centred. With Functional English courses in higher education, there may be added problems in that the goal of the students lies in the development and enhancement of communication skills, with the development of critical thinking being perceived as an alien skill. Critical thinking skills may even be seen as irrelevant, given the nature of the assessment they will expect to face.

Overall, there are several practical suggestions given in the literature which seek to encourage the development of critical thinking skills. These include the teacher exemplifying the way of thinking that constitutes critical thought. This can be done in the way new information is presented along with teacher encouragement in the practice of appropriate questioning. This will almost certainly involve some element of group work and more interaction between teacher-student and among students. Of course, curriculum goals need to specify critical thinking as an important outcome while the assessment system must be adapted in some way to reward evidence of critical thinking.

Against the background of this critical review of the ideas collated from the literature, this study will focus on the perceptions of students and teachers in relation to the nature and development of critical thinking skills as part of Functional English courses in Higher Education in Pakistan, highlighting the perceived facilitators and barriers in this process.

The next chapter presents the analysis of Functional English course guidelines, from the perspectives of the development of critical thinking.

Chapter 4

Analysis of Functional English Course Guidelines

Learning another language is not only learning different words for the same things, but learning another way to think about things.

Flora Lewis

4.1 Introduction

The quotation above illustrates the great possibilities in learning another language in that this may open doors to new ways of thinking for the learners. Chapter 3 reviewed the literature related to critical thinking itself. This considered its nature, importance and some factors that might encourage its development. Critical thinking is conceptualised as purposeful thinking which leads to skills such as analysis, evaluation, weighing evidence, considering options, making judgements, all of which require appropriate questioning (see figure 3.7). In chapter 2, an overview of the educational situation in Pakistan was provided. This described the role of the Higher Education Commission in developing generic curriculum guidelines for BEd (Honours) in collaboration with USAID (HEC, 2012a). These guidelines took into account previous Higher Education Commission policy documents (eg. NEP 2009) as well as the Higher Education Qualification Framework (HEC, n.d.). The aim of this chapter is to analyse the Functional English Course Guidelines to see how they saw critical thinking in relation to the course objectives. The Functional English Course Guidelines took into account the previously published BEd (Honours) Curriculum which in turn derived from the Higher Education Qualifications Framework (HEC, n.d.) and National Education Policy, 2009 (see figure 4.1).

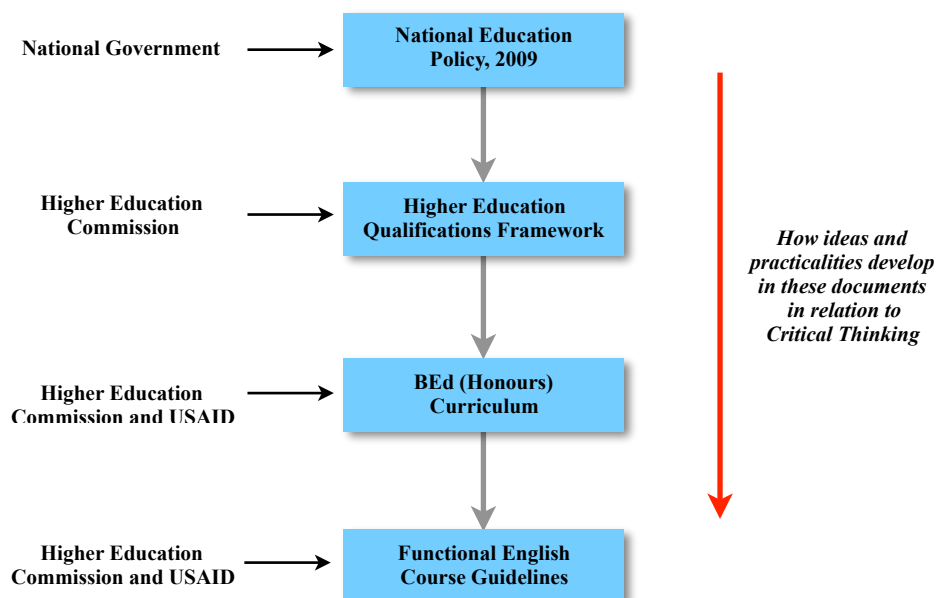


Figure 4.1 Documents Analysed

The chapter starts by tracking through the way ideas developed and then it moves to offer exemplars of the way the course could be offered, these exemplars illustrating possible opportunities where critical thinking skills might be fostered.

4.2 The Development of the BEd (Honours)/ADE Course

The National Education Policy (2009) emphasises the need to raise the quality of education stating that, *‘improving quality requires action in the areas of teacher quality, curriculum and pedagogy, textbooks, assessment approaches, and in learning environment and facilities’* (p.42). Follow-up on this major initiative was completed in Pakistan in relation to teacher education in 2009. This involved the Ministry of Education, with the cooperation of UNESCO and the financial support of USAID. The output from this cooperation was the publication of National Professional Standards for Teachers in Pakistan (MOE, 2009). This document offers a good summary of some of the major challenges facing teacher education in Pakistan. Of greater importance, it identified the way ahead in terms of standards to be expected of teachers, such standards offering a very clear picture of the criteria that should underpin teacher education programmes.

This led to the development of a new project named Pre-Service Teacher Education in Pakistan (Pre-STEP), with funding from USAID. One of the major goals of this project was to improve teacher education practices and policies in Pakistan. Alongside this was the development of four year undergraduate programmes for Education and two year Associate Degree in Education across Pakistan colleges and universities. Under the Pre-

STEP project [later renamed as Teacher Education Programmes (TEP)], there was collaboration involving faculties of education in Pakistan and the USA in developing new curricula for teacher education programmes (Pre-STEP, 2009). The new curriculum reform proposed to close completely the Primary Teachers Certificate (PTC) and Certificate of Teaching (CT) and to phase out the 1 year BEd programme by 2016.

The Pre-STEP programme (Pre-STEP, 2009) outlines plans of study for BEd, ADE, and MEd programmes of study, with accreditation to follow. The information on Pakistan government websites is frequently not kept up to date but more useful information can be gained from two major websites about teacher education in Pakistan administered by USAID and UNESCO. One of the sources of information in this study are the documents shown in figure 4.1. These have been used to identify key questions for the study in this thesis. These have been used to underpin the structure of the questionnaires, interviews, focus groups and observations (Yanow, 2000; Denscombe, 2007; Corbin & Strauss, 2008).

Looking at the documents available indicates that The National Professional Standards for Teachers (USAID-TEP, 2013) have been seen as defining the goal in seeking major teacher education curriculum reform. In section 3.3 of The National Professional Standards for Teachers, the key issues for teacher education are outlined succinctly. They note, *'unquestioning acceptance of textual materials and passive preparation for the tests'* as a feature of current provision. They lay stress on, *'communication skills, critical thinking and creative instructional leadership'* (p.8). Later in the document, ten professional standards are outlined and each standard is considered under three headings: what the teacher should know; behaviours, attitudes and values; what teacher can and should be able to do. Under standard 2-C (p.11), they refer to the promotion of critical thinking skills.

The new curricula for BEd Honours/ADE have three major features (Pre-STEP, 2009). The first is a focus on the English language, with the medium of instruction being English in all courses (except Islamiyat and Urdu). Three compulsory courses were included within the plan of study, the focus being on English language literacy and functional English. The second is an emphasis on the use of technology. Two compulsory courses were included: a computer literacy course and an ICT course. There was a strong emphasis on the use of internet resources. The third is an increase in the duration and frequency of practice teaching, from one period of practice teaching at the end of the programme, lasting six to

eight weeks, to four periods of practice teaching in four different locations. These features were not present in the previous teacher education programme. The increase in time allowed for the new courses has assisted in enabling these features to be introduced. However, the role of the Pakistan government in seeking improvements in teacher education has been more important while the involvement of USAID has catalysed the changes.

4.3 The Development of Functional English Course

Higher Education Qualification Framework (undated) developed lists of generic skills expected to be developed through BEd honours and ADE courses. This included an emphasis on critical thinking that has determined the focus of this thesis. The Functional English course was selected in that this course is compulsory for all graduate courses and it gave an opportunity to explore how critical thinking might be developed across the student population. The new curriculum laid overt emphasis on the development of wider skills including critical thinking. This provides an opportunity to explore the perceptions and development of critical thinking skills as this new curriculum structure is tried out in several universities and colleges. Although the focus is not on Education courses nor on any exploration of the effectiveness of teaching English as a second language in new ways, it is helpful to highlight the salient features of this new Functional English course to see how changes in approach might be encouraging the development of critical thinking skills.

The focus of the project in this thesis draws from these developments: the enhanced role of Functional English and the repeated emphasis on the development of critical thinking skills. The central questions relate to how critical thinking can be developed in this course and the extent to which the key stakeholders are aware that critical thinking is being developed. This leads to a consideration of the way the suggested activities may or may not be contributing to the development of critical thinking. This has defined the agenda for data gathering.

Working with USAID, the Higher Education Commission has published course guidance for Functional English, a mandatory course in teacher education programs (HEC, 2012a). Teaching and learning of English poses problems in many public schools and colleges

where the study of English is rarely a favourite course for students. In the traditional translation approach, the teacher reads the text, translates it into Urdu, writes down the meaning of difficult words on the black board and dictates the answer of the questions given at the end of the text. The students have to reproduce the answers in examinations and get promoted to the next class.

Keeping in view the above mentioned scenario, HEC and USAID worked hard in designing Functional English and other courses for ADE and BEd Honours. Unlike other courses, there is no prescribed textbook for this course. The course guidelines for Functional English offers an outline of course objectives and provides suggestions on how to teach the content of the course, identifying potential resource materials.

HEC (2012a) outlines the course objectives:

‘The purpose of this course is to develop the English language proficiency of prospective elementary school teachers, and to help them become confident in reading, writing, speaking and listening to the English language. Instead of teaching grammar in isolation and at sentence-level only, this course is based on developing the language abilities of student teachers through an integrated approach that provides opportunities to develop their listening, speaking, reading and writing skills. With a focus on social interaction, the course draws specific attention to accurate use of structures, improved pronunciation and to developing active vocabulary in descriptive, narrative and instructional texts.’ (p.5)

Apart from development of student communication skills, other objectives are specified (HEC, 2012a):

- (1) To understand and use English to express ideas and opinions related to students’ real life experiences inside and outside the classroom.
- (2) To give reasons (substantiating) justifying their view
- (3) To ask and answer relevant questions to seek information, clarification etc.
- (4) To distinguish between relevant and irrelevant information
- (5) To distinguish between fact and opinion
- (6) To enable students to write descriptive, narrative and argumentative texts

These objectives are more generic in nature but objectives 2-5 have the potential to encourage critical thinking which has been adopted for this thesis (in chapter 3) as purposeful thinking leading to a set of skills (analysis, evaluation, weighing evidence, considering options, making judgements) all of which involve questioning.

The Functional English guidelines can be analysed to illustrate how the course designers envisaged the goals of the course and how they might be achieved. The guidelines emphasise the key purpose of the course: *‘to develop the English-language proficiency of*

prospective elementary school teachers and to help them become confident in reading, writing, speaking, and listening to the English language' (p.9). This stresses all four aspects of language learning and moves the emphasis away from the former tradition of translation where grammar was taught separately. The approach is now described as *'integrated'* (p.9) and seeks to provide opportunities to develop student listening, speaking, reading, and writing skills. They specifically advocate *'social interaction'* (p.9) in the development of language skills.

It is interesting to note that, while critical thinking is not mentioned specifically as a course outcome (although it can be argued that it is implied), critical thinking is referred to in several places throughout the document. Thus, in the Foreword which reflects the Higher Education Commission thinking, it states (p.3):

'Colleges and universities that use programs like these provide their students with the universally valuable tools of critical thinking, hands-on learning, and collaborative study.'

There is also reference to *'developing a critical understanding of the essentials of a manual guide, or prospectus'* (p.12). On page 13, it states that, *'student teachers will learn how language works and how to critically evaluate texts in terms of effectiveness, meaning, and accuracy'* while, in discussing classroom routines, they recommend inviting, *'student teachers to think more critically about what they already know and what other alternative language expressions'* might be employed (p.32).

4.4 Possible Learning Models Employed in Course Development

The Functional English course guidelines advocate numerous learning and teaching approaches which the course developers consider will help in achieving the desired objectives. Underpinning this, they advocate an *'integrated approach to language teaching that teaches all of the four language skills - listening, speaking, reading, and writing - in natural settings'* (p.9). Specifically, they argue for, *'pair and group work and active learning strategies, such as role play, debates, presentations, and brainstorming'* (p.9). They also recommend the use of online resources and, *'interactive exercises on various websites'* (p.10). They see assessment being highly linked to these learning approaches, the aim being to encourage student teachers to, *'accept responsibility for their own learning'* (p.10).

When the goal is the development of critical thinking skills in the context of language learning, it is important to give the students tasks and opportunities where such skills are perceived to be valuable and where they can practice critical thinking, with relevant feedback from the instructor. Much research in the area of the curriculum has shown that pair and group work, as well as strategies such as role play, debates, presentations, and brainstorming are fruitful strategies in the development of critical thinking and related skills (Johnstone, Percival and Reid, 1981; Byrne and Johnstone, 1983). In these studies, the authors developed what they called teaching units. In each of these a discipline-based problem or issue was presented and students were given information, data, or sometimes, library references, and they were asked to work in small groups to proceed through a series of decisions in order to address the issue presented. The focus was not on achieving ‘right’ answers. The focus was overtly stated in terms of the development of all kinds of skills including analysis, interpreting information, and critical thought. They observed that the approach worked well. This has been confirmed in numerous studies and meta-studies more recently, covering wide areas of the curriculum including English learning (eg. Gokhale, 1995; Duron, Limbach and Waugh, 2006; Masduqi, 2011; Yusuf and Adeoye, 2012; Abrami *et al.*, 2014). Overall, the literature is replete with the examples of the effectiveness of collaborative learning which can offer opportunities for questioning for the development of critical thinking skills. Thus, brainstorming, pair work, group work, presentations, role play and so on are considered effective tools for enabling students to think and respond.

While the course lists aims and objectives with suggested activities, there is no overt reference to any educational model underpinning its construction. However, it is possible that the ideas developed by Bloom (1956) lie behind the thought-forms of the course developers. Specifically, there is an emphasis on words like, ‘*analysis, synthesis and evaluation*’ and these describe the three higher levels of the Bloom’s Taxonomy. The curriculum developers appear to think of analysis in terms of critical thinking focussing on the components of the material to be learned. Similarly, Duron, Limbach and Waugh, (2006) argued that synthesis was critical thinking which involved pulling things together while evaluation was critical thinking encompassing making judgments based upon information.

The Bloom Taxonomy was an early attempt to describe educational objectives, an emphasis stressed cogently by Mager (1962). However, while Mager discussed the issues

in all areas of education, the Bloom Taxonomy focussed on assessment. Nonetheless, it is proved useful in curriculum development and it has made a major impact in the United States and, therefore, it is unsurprising that it appears to underpin the USAID input into the Functional English course (Xu, 2011). However, Xu (2011) also noted Paul and Elder's framework of critical thinking (Paul and Elder, 2001). They argue that reasoning has a purpose. The learner is seeking to create meaning and this may involve curiosity, argument and some kind of attempt to understand the perspectives of others. This applies in all areas of curriculum including language learning. Here communication can be seen in terms of sharing meanings while literature is designed to stimulate, challenge, arouse thoughts, engage the emotions, among other things.

In a sense, this adds interpretations as well as a kind of 'problem solving' in seeking to grasp meaning. Paul and Elder developed a critical thinking framework, developed in part from Paul's (1995) viewpoint that educators are seeking high quality reasoning in their students, coupled with high performance. They see the development of critical thinking as important in achieving these goals and relate this to the interpretation of the text, the analysis of creative writing and the development of clarity, accuracy and precision in the use of language. They also note the vital importance of evaluation which implies asking questions related to all new materials facing the students. The thinking shows some similarities to that of Paul and Elder (2001). There are also parallels with the findings of Vygotsky and his work has been discussed in chapter 3.

It is possible to see the Functional English course guidelines as offering excellent scaffolding to support the development of critical thinking skills as well as the enhancement of language skills. It does this by outlining all kind of activities and the structure of these activities gives the students support in developing their skills as well as allowing the teacher to offer initial support which is then gradually withdrawn. These activities are described as pedagogical tasks and this is now discussed in the following section.

4.5 Teaching and Learning Language

Nunan (2006) speaks of the concept of a task as an important element in syllabus design, classroom teaching and learner assessment. The Nunan definition of a task is

‘... a piece of classroom work that involves learners in comprehending, manipulating, producing or interacting in the target language while their attention is focused on mobilising their grammatical knowledge in order to express meaning, and in which the intention is to convey meaning rather than to manipulate form. The task should also have a sense of completeness, being able to stand alone as a communicative act in its own right with a beginning, a middle and an end.’ (p.17)

The Functional English curriculum guidelines often refer to what are described as pedagogical tasks and this can be seen in Nunan’s ideas where he sees a pedagogical task as a classroom activity or action arising from processing or understanding language: for example, drawing a map while listening to a tape or listening to an instruction and performing a command for a language point. Nunan (2006) speaks of such tasks making language teaching more communicative. In this, language practice is not carried out for its own sake but is set in the context to learn something. Tasks may or may not involve the production of language. However, language has to be used meaningfully in completing the task.

Duron, Limbach and Waugh, (2006) argue for teaching through questioning and this is consistent with the repeated message from many authors (see chapter 3).

‘Questioning is a vital part of the teaching and learning process. It allows the teacher to establish what is already known and then to extend beyond that to develop new ideas and understandings. Questions can be used to stimulate interaction between teacher and learner and to challenge the learner to defend his or her position, (i.e., to think critically).’ (p.162)

They present a 5-step model in offering an outline relating to how to move students towards critical thinking (figure 4.2).

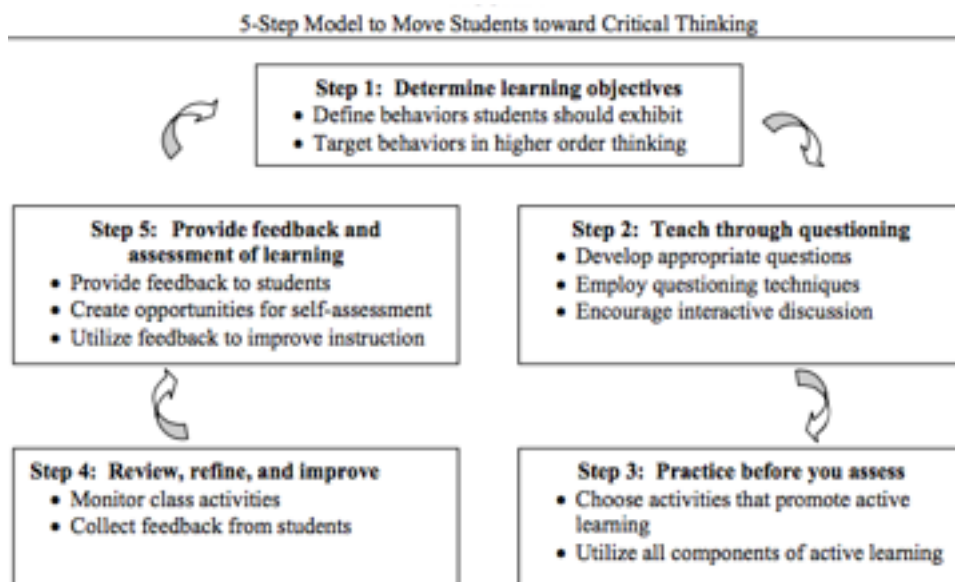


Figure 4.2 The 5-step model (from Duron, Limbach and Waugh, 2006)

They do not give examples of specific pedagogical techniques but they emphasise the need to develop questioning techniques and that the questions generated have to be appropriate while they see one important feature being interactive discussion. They also stress the importance of feedback and this, in itself, is likely to generate critical thought, the aim always being to develop better practice in teachers. Indeed, critical thinking implies reviewing, refining and improvement. Much of this is reflected in the Functional English course guidelines with their recommended activities for both students and the teachers, and these are now considered.

In the Functional English course guidelines, numerous examples are given of the kinds of activities that are recommended, revealing considerable imagination and creativity. Three are shown to illustrate the approach adopted: brain-storming (figure 4.3), working in pairs, writing from photographs (figure 4.4). It is interesting to note how much questioning is integral to the activities in the guidelines, consistent with the observation that questioning is central in all critical thinking.

In Unit one (Introductions) students are provided with an opportunity to interact with each other in oral and written form. They were asked to *‘develop conversation by using simple words and sentences to describe people, preferences and other conversational topics in a logical sequence’* and the following active learning strategies have been described:

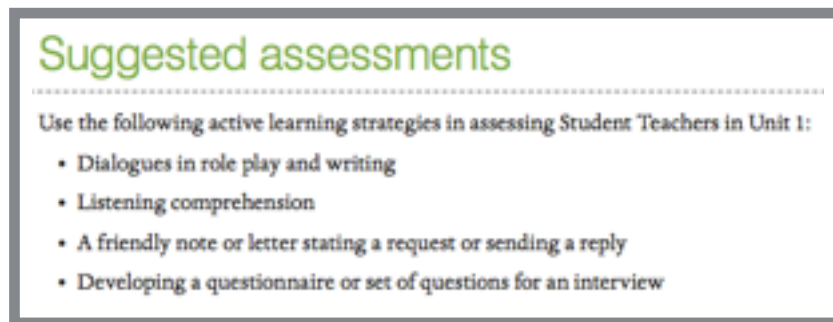


Figure 4.3 Suggested Assessments (p.17)

Students are asked to think and respond to the questions posed by teacher in the brainstorming sessions (figure 4.3). Similarly, students work in pairs to ask questions from each other and this involves considering mentally what might be the best responses. In the following diagram, the example of brainstorming indicates that all these questions make students think and respond.

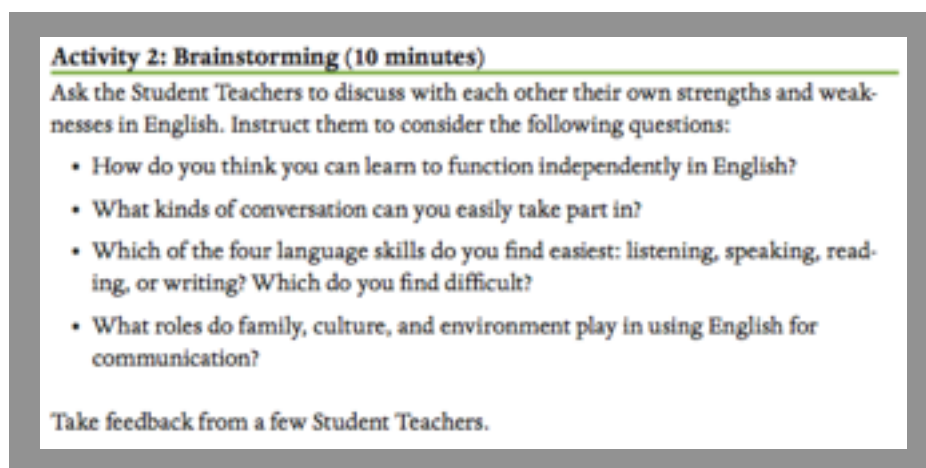


Figure 4.4 Example of Brainstorming (p.18)

In another example, students are asked to work in pairs:

‘As a class activity, ask Student Teachers to work in pairs as the host and the guest for the event and role-play the telephone invitation. Point out polite expressions of invitation that they could use’ (p. 44).

Students are then directed to a web-site (BBC, undated). This gives an opportunity for students to think about how best they can communicate the invitations. This involves reflection on the correct use of grammar, language structure and the appropriateness of the communication chosen.

In another activity, students are asked to listen to some spoken English and complete a quiz on what they have heard (figure 4.5, overleaf)



Polite invitations

In last week's programme, we found out how to make informal invitations. This week, we look at slightly more polite invitations. For example, how would you ask a friend to your house for a dinner party?

This programme is suitable for elementary/pre-intermediate learners.

When you've listened to the programme, don't forget to practise what you've learned with the quiz below!

[Listen - realmedia](#) [Download - mp3 \(1.7 MB\)](#) [Script \(pdf - 24k\)](#)

Click on a link below to listen to the two dialogues in this programme again or read a transcript of the conversations.

[Listen - realmedia](#) [Download - mp3 \(236 KB\)](#) [Script \(pdf - 14k\)](#)

Figure 4.5 Polite Invitations (website above)

It is possible to encourage questioning in the context of writing and an example is shown below (figure 4.6) where students have been given photographs and by using their imagination they have to write down a story or description.

Activity 2: Writing from photographs (40 minutes)

Share the photographs below or two similar photographs of your choice. Ask Student Teachers to select one photograph and write a paragraph about it. Encourage them to use interesting, descriptive words. Share and discuss the following questions before Student Teachers begin writing:

- What do you see in the picture?
- Which season is it? How can you tell?
- Did you notice the way the light is shining? Do you see any special reflections? If so, describe them.
- Imagine you were present at the time this photograph was taken. Complete the similes: "The air smells like ..." and "The wind rustles through the leaves like ...". Use your other senses to describe how and what you feel.
- What does the photograph make you feel like doing?
- Does it inspire any emotions in you? If so, describe the emotions.
- Do you have any other thoughts about the photograph?

Figure 4.6 Writing from Photographs (p.72)

The questions being asked in the activity encourage critical thinking because students have to weigh options. Activities suggested for the course have been illustrated above. The central purpose of these activities focusses on the development of the language skills of listening, speaking, reading and writing. However, such activities do offer scope for the development of critical thought. Students have to consider options, question the best ways to communicate in given situations while critical thought may be an important element in

both listening and reading. Of course, there is no guarantee that critical thinking skills will develop. However, given appropriate teacher encouragement, there is great scope for students to ask appropriate questions in relation to the material being given to them as well as continuing questioning the best ways by which ideas can be communicated clearly in a second language in both verbal and written forms.

Looking at the examples above it can be argued that the Functional English curriculum developers specify clear goals for the course and break these down into subgoals and activities. While no underpinning educational models are specified, there are similarities with Bloom (1956) [words like analysis, evaluation], Vygotsky (1978) [social interaction] and Paul and Elder (2008a,b) [curiosity, argument and some kind of attempt to understand the perspectives of others] while much is consistent with the work of Duron, Limbach and Waugh, (2006) [teaching through questioning].

Looking at the course guidelines and the way activities have been designed it can be argued that this course potentially encourages a student-centred class. Student-centred or learner-centred learning is a pedagogical approach that emphasises active learning. Schweisfurth (2013) describes it in terms of giving the learners a ‘relatively high level of active control over the content and process of learning’ (p.20) while O’Neill and McMahon (2005) emphasise greater collaboration and inter-dependence between the teacher and students. Boyapati (2000) considers that it is reasonable to assume that the development of critical thinking requires students to have the opportunities to practice and receive feedback. He sees student-centred activities such as group discussions as being helpful. However, McCombs and Miller (2007) have noted that there are numerous ways to foster critical thinking and these include debates, role-playing, Socratic or higher-order questioning, project based learning, and incorporating various interactive technologies. Hickman (2007) notes the need for scaffolding as students start to think critically but, with experience in using the approaches outlined by McCombs and Miller, the skills of critical thinking will begin to grow.

Johnson and Johnson (1999) observe that cooperative learning can be a major part of student-centred learning and this differs from other group work in that students are interdependent on each other through the learning process, where they participate in group discussions, solving problems, making decisions, and ensuring the task is completed

4.6 Summary

In looking at the place of critical thinking in higher education in Pakistan and the way it has been woven into the mandatory Functional English course, developments over many years have played an important role. It started with government understanding that teacher education needed a major overhaul. The HEC then collaborated with USAID to develop radically new approaches to teacher education by introducing BEd (Honours)/ ADE programmes.

Within the Functional English course, there was a strong move away from a grammar-based translation method depending on written assessments that depended largely on recall of correct English. The Higher Education Framework (HEC, n.d.) and course guidelines emphasise the four basic skills of reading, writing, listening, speaking while and also laid considerable emphasis on the development of a wide range of skills, one of which is critical thinking. One of the difficulties lies in the lack of any clear definition showing how the documents saw the nature of critical thinking. The documents tended to refer to some of the skills (such as analysis, evaluation, weighing arguments) that might be associated with critical thought. There was no emphasis on any idea of a critical thinking disposition or the way of thinking, ideas that are very apparent in the literature. Equally, nothing is offered to suggest how to develop skills like critical thinking or how to show that such skills have been developed with students.

The Functional English course guidelines seem to be drawn from numerous approaches (Bloom, 1956; Vygotsky, 1976; Duron, Limbach and Waugh, 2006; Paul and Elder, 2008). The approach advocated is strongly student centred focussing on learning through ‘social interaction’ (HEC, 2012a) which is consistent with those who follow the Vygotskian approach of learning through interaction. Much is built around pedagogical tasks where students work in pairs or groups to brain-storm, to solve problems and to develop the best ways to communicate in some practical situation. Teachers are encouraged to ask questions and these questions are appropriate in the sense that they encourage evaluation of what is being said, the purpose of the communicator and potential mis-communication with better ways forward. The goal always seems to be to develop the best way to communicate. Implicit in all this is the idea of questioning, debate, evaluating and the range of skills that might constitute critical thinking. Thus overall, the guidelines do offer a context where critical thinking skills might well be encouraged and developed with students. The next chapter outlines the way the study was carried out in its attempt to explore what happened in relation to the development of critical thinking.

Chapter 5

Methodology and Procedures

If we knew what it was we were doing, it would not be called research, would it?

Albert Einstein

5.1 Introduction

Research, by its very nature means going into the unknown as Einstein understood very clearly. While research can be planned and methodologies chosen, what is found is not known at the outset. Chapter 4 has provided a brief documentary analysis of the guidelines for Functional English course. This chapter presents the research paradigm and the methodology used in this study. The ontology and epistemology underpinning the work is also discussed. The study focuses on critical thinking in the specific context of a new Functional English course. This is a mandatory course in the revised ADE (Associate Degree in Education)/ BEd (Honours) programme currently being implemented in universities in Pakistan. This exploratory study involved two phases; phase-I was conducted at the beginning and Phase-II was carried out near the completion of Functional English (FE) Course. Phase I and II included surveys through structured questionnaires, completed by both student teachers and teachers, followed by teacher interviews and focus group discussions with student teachers. In order to explore what was happening as student teachers undertook the course, classroom observations were made during the course.

Before discussing the details of the approach adopted in this study a brief discussion is now offered about the underpinning research paradigm.

5.2 Research Paradigms

A paradigm is ‘a whole system of thinking’ that includes ‘basic assumptions, the important questions to be answered or puzzles to be solved and the research techniques to be used’ (Neuman, 2000, p.65). Research paradigms are closely interlinked with the respective underpinning ontological, epistemological and methodological assumptions, beliefs and questions. Cohen *et al.* (2011) have elucidated the features of the two major research paradigms by providing exemplars with respect to ontology, epistemology, methodology and methods or techniques for each of the paradigm. Ontological questions

concern the assumptions and beliefs we hold about the nature of being and existence. Epistemology is concerned with the theory of knowledge, our assumptions and beliefs about the nature of knowledge; and methodology, finally, is concerned with how we gain knowledge about the world. The following discussion considers different paradigms

A number of theoretical paradigms are discussed in the literature (e.g. Grix, 2004; Dunne, Pryor and Yeats, 2005; Crewell, 2009; Cohen *et al.*, 2011; Scotland, 2012) such as: positivist (and postpositivist), constructivist, interpretivist, transformative, emancipatory, critical, pragmatist and deconstructivist. The use of different terms in different texts, and the varied claims regarding how many research paradigms there are sometimes leads to confusion. Here, the two most commonly used paradigms i.e. positivist and interpretivist are being discussed.

Table 5.1 presents a summary of the two major paradigms in relation to methodologies and methods used.

Paradigm	Ontology <i>What is reality?</i>	Epistemology <i>How can I know it?</i>	Methodology <i>How do I approach finding out?</i>	Methods <i>What techniques are best to use?</i>
Positivist/ Postpositivist	There is a reality 'out there'	It may be possible to measure given the right tools	Experimental or survey research	Quantitative, "Although qualitative methods can be used within this paradigm, quantitative methods tend to be predominant . . ." (Martens, 2005, p. 12)
Interpretivist/ Constructivist	Understanding is created in the mind of individuals	Reality needs to be interpreted	Often linked to observation, phenomenology, discourse analysis	Qualitative methods predominate although quantitative methods may also be utilised.

Table 5.1 Major Paradigms in Research

(developed from Martens, 2005, p. 12, Cohen *et al.*, 2011)

In the positivist paradigm, the world is often seen in terms of causes and effects, with emphasis on relationships. Ontologically speaking, reality exists out there and, with the right research instruments, it is possible for the researcher to find out and discover it. Martens (2005, p. 8) traces its origins right back to Aristotle while Creswell (2009) focusses on the cause-and-effect characteristic, the paradigm being extended to allow for multiple models of reality influencing research. This paradigm is often aligned with quantitative methods of data collection. By contrast, the second paradigm is known as interpretivist or constructivist and it grew out of interpretation of texts (hermeneutics) (Martens, 2005). This paradigm considers the world of human experience (Cohen and Manion, 2007) since it takes the view that 'reality is socially constructed' (Martens, 2005,

p.12). As a result, participants' views are situated at the centre of the research process in order to understand fully the reality as perceived and interpreted by the participants themselves. It is, therefore, not surprising that the interpretivist or constructivist paradigm encourages qualitative methods (Creswell, 2003).

This research focuses on the views and the experiences of those involved in the implementation of the innovative Functional English course: both teachers and student teachers. Specifically, the study will explore the perceptions of participants in relation to critical thinking. Since this study explores the perceptions of participants regarding critical thinking and not critical thinking as a reality out there (see table 5.1), it does not fit into positivist paradigm. Instead, the nature of the current study places participants' perspectives within the interpretivist paradigm 'grounded in people's experience' where interpretivists 'explore the meaning of events and phenomena from the subjects' perspectives' (Morrison, 2007, p.26).

As an interpretivist researcher, the goal in this study is to develop an understanding of how critical thinking is perceived by teachers and student teachers in the context of a revised Functional English course. Interpretive approaches heavily rely on naturalistic methods (interviewing and observation and analysis of existing texts). Taking all this into account, a mixed method design (predominantly qualitative) was considered appropriate for this study. Mixed method design allows the use of multiple types of data collection that are aligned with both qualitative and quantitative approaches (Cohen *et al.*, 2011). The mixed method approach adopted here allowed the data to be gathered by different tools (see section 5.5 on research design and tools to be used). Besides ontological and epistemological considerations, practical and pragmatic factors such as access to data sources, time and resource availability and the nature of the inquiry also played important role in adopting the interpretivist paradigm. The details of practical and pragmatic factors are discussed later in this chapter.

5.3 Research Objectives

As discussed in chapter 2, one of the wider goals for teaching and learning at all levels is the need to encourage and develop critical thinking skills (NEP, 2009). This research project is an attempt to explore how the aspirations of the curriculum developers were being translated into practice in the context of a Functional English course. The focus on Functional English reflects the discipline background of the researcher as well as being one of the few courses which were mandatory for all students. The nature of critical thinking and its characteristic features have already been discussed in chapter 3. However, a working definition of critical thinking for the purpose of this study has been conceptualised as purposeful thinking leading to a set of skills (questioning judgments and evaluations, weighing arguments, judging the quality of evidence, evaluating claims and the credibility of sources, being open minded and aware of implicit assumptions, questioning possible interpretations) involving productive questioning. The USAID had worked with the HEC, Pakistan through the Teacher Education Project to develop, introduce, and implement effective curricula for a new Associate Degree in Education (2 years) and Bachelor of Education (B.Ed Honours) degree programmes. The new programme is being offered in 22 Universities and 75 Elementary Colleges in Pakistan since 2012. Despite numerous curriculum documents advocating the development of critical thinking at all levels in Pakistan (HEC, 2013), no explicit reference has been made in the syllabus and course guidelines of Functional English about the development of critical thinking skills. However, many of the skills that constitute critical thinking (like analysing, evaluating) are mentioned specifically to be developed through the course.

Against this background, the objectives of this research study were to:

- 🕒 Investigate English teachers' and students' perceptions of critical thinking before and after studying Functional English-I in ADE/B.Ed (Honours).
- 🕒 Identify the potential facilitators and barriers English teachers and students perceive in delivering and fostering critical thinking through Functional English.
- 🕒 Observe the implementation of prescribed syllabus and the extent to which course guidelines are being followed in the Functional English class.
- 🕒 Explore the indicators that critical thinking has been understood, taught, learned and applied in a day-to-day context.
- 🕒 Make recommendations for possible ways forward in fostering critical thinking.

5.4 Research Questions

This exploratory study was designed to investigate the following research questions:

- (1) What are English teachers' and students' perceptions of critical thinking before and after studying Functional English course in ADE/B.Ed (Honours)?
- (2) What do teachers and students consider to be facilitators and barriers in fostering critical thought through the Functional English course?
- (3) To what extent does the delivery of the course foster development of critical thinking in the classroom?




5.5 Research Design

Trochim (2006) describes research design as the structure of the research project where all the elements are brought together to make a coherent whole. After gaining good understanding of both quantitative and qualitative research, it was decided to combine both approaches which Johnson, Onwuegbuzie and Turner (2007) regarded as the fundamental principle of mixed research. Creswell *et al.* (2003: p. 212) described the mixed method approach:

‘A mixed methods study involves the collection or analysis of both quantitative and qualitative data in a single study in which the data are collected concurrently or sequentially, are given a priority, and involve the integration of the data at one or more stages in the process of research.’

Patton's (2002) claim provides a good rationale for my mixed method study that *‘studies that use only one method are more vulnerable to errors linked to that particular method . . . than studies that use multiple methods in which different types of data provide cross data validity checks’* (p. 188). The choice of mixed method approach for the present study is further supported by assertions Johnson and Onwuegbuzie (2004) that merging qualitative and quantitative data provides a more comprehensive understanding of the problem with an opportunity to triangulate the results.

Tashakkori and Creswell (2007, p. 4) have outlined the key elements in combining qualitative and quantitative approaches:

-  ‘Research questions with qualitative and quantitative approaches.
-  Framing the research questions developed in the participatory as well as preplanned manner.
-  Following two types of sampling procedures.

- Multiple data collection procedures Including focus groups, interviews and surveys.
- Collection of numerical as well as textual data.
- Statistical as well as thematic analysis of data; and
- Emic and etic representations in conclusions (i.e. 'objective' and 'subjective'.)

Based on the work of Greene *et al* (1989), Onwuegbuzie and Combs (2010, p.3) have listed five possible purposes for mixed method research and have used five terms to summarise the ideas which are closely linked to the methods of the present study their views being summarised in the context of this project:

Triangulation: Comparison of findings from the data obtained from four sources (surveys, interviews, focus groups, observations) offers potentially rich comparisons in gaining insights into the perceptions of stakeholders.

Complementarity: This explores the extent to which there is consistency in that data generated by one tool might throw light on data arising from the other tools. Consistency has been a major consideration in the present study. The emerging pictures may not show perfect consistency but should be able to show the level of consistency.

Development: One source of data can often point to the need to seek data from another source, thus generating an agenda for further work. Future research based on outputs of the present study can address these questions.

Initiation: The paradoxes and contradictions from research data from multiple sources may well generate questions which are needing further exploration.

Expansion: It is possible for a single approach to become somewhat myopic. In the study here, the agenda was kept as wide as possible to eliminate any bias regarding the research questions.

According to Cohen, Manion and Morrison (2007), triangulation is merging of two or more methods of data collection to study human behaviour. Triangulation seeks the consistency of results gained through different instruments and confirms the findings as well as allowing data for different sources to be compared to look for interesting differences (Creswell, 2003; O'Donoghue and Punch, 2003; Cohen, Manion and Morrison, 2007). In this mixed method study, a methodological triangulation is used by employing different data collection tools (eg. questionnaires, interviews, focus groups and observation). All of this provides greater confidence in the findings.

In this study, information was gathered from three main approaches:

- Responses to survey questions - written (through questionnaires for teachers and students)
- Open responses to interviews and group discussion - speech (Teacher interviews and student teacher focus groups)
- Observation of what was actually happening - observation (class room observation)

Two key things were done: First of all, the data from interviews and focus groups were considered to explore the extent to which these confirmed, or elaborated on, the findings from the questionnaire. Secondly, in making observation of the actual teaching and learning situations, the aim was to seek to explore whether what was being seen was consistent with the picture that had been built from the data from interviews, focus groups and questionnaires. In fact, if two independent sources of data give consistent outcomes, then there will be increased confidence in the credibility and validity of results. Comparing data from multiple sources may well give confirmatory findings or, the data from two sources may be in some measure contradictory. This latter situation is the more interesting in that conflicting outcomes can often generate more interesting questions to be followed by further studies.

Although there were many advantages of using mixed method design but some challenges were also associated with this design, Malina, Nørreklit and Selto (2011) argue that mixed method design is very time consuming, requiring a good knowledge of both qualitative and quantitative paradigms. According to them, there is a danger that interpreting different types of data is more challenging as compared to data from one source. However, the researcher spent enough time in gaining good understanding of both paradigms and tried to complete data gathering in a very organised way. Participants were informed well ahead of time for being available to take part in the process and care was taken in data interpretation by consulting both audio tapes and field notes.

Keeping in view the details of the research design and the arguments for the methods to be used, figure 5.1 summarises the way the study was approached.

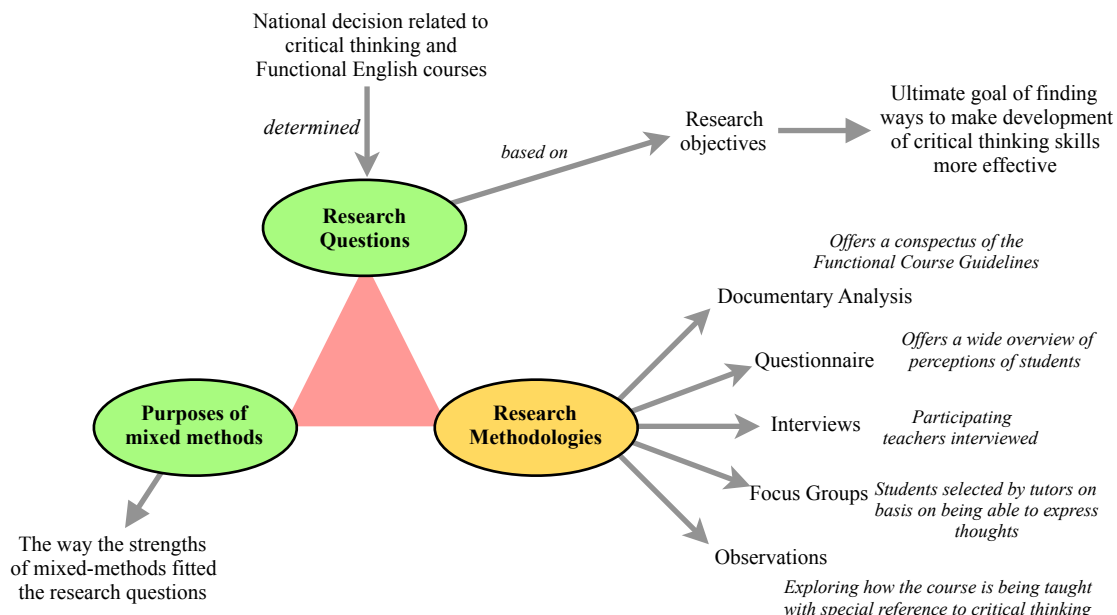


Figure 5.1 Setting up the research project

Figure 5.2. illustrates how the research project was set up. The current study was conducted in two phases. Phase-I was undertaken at the start of the Functional English course while Phase-II was conducted at the end of the semester with the aim of looking for any change in relation to perceptions of critical thinking. In the second phase, identical question items were used for all the research instruments (questionnaires, interview schedule and focus group discussions). Five classroom observations were made *during* the course in five institutions. The approach adopted in this study allowed the use of four different tools for exploration. Numerical patterns derived from questionnaires were intended to offer an overview of participant perceptions related to the place of critical thinking in this Functional English course in relation to previous English courses. The descriptions arising from interviews and focus groups were expected to amplify and enrich these insights. The observations would provide an opportunity to explore the extent to which the course guidelines were followed in the context of fostering critical thinking skills. Words and narrative elaborated the numerical data while the numerical data added useful insights. The view of the methodological purists were disregarded because that would close off useful ways to gain insights. In seeking to find the perceptions regarding the nature of critical thinking, it is imperative to avoid researcher bias otherwise the whole exercise will become the researcher's attempt to prove something.

The procedure of data collection is summarised in figure 5.2.

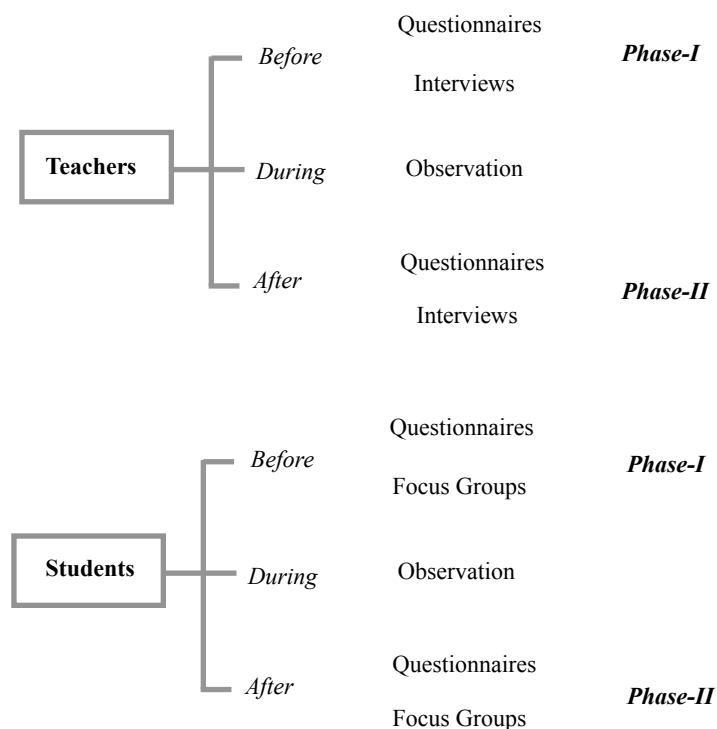


Figure 5.2 Plan of Exploratory Stages

For the sake of clarity, the quantitative and qualitative methodology adopted during phase I and II are discussed separately.

5.6 Quantitative Approach in Phase-I and Phase-II

Much of the quantitative data collected in both phases of the study for examining the perceptions of the teachers and students regarding critical thinking and their previous experience of teaching and learning English as a language was gathered through questionnaires as suggested by several authors (eg. Oppenheim, 2001). Using this method a large amount of data can be gathered from large samples very rapidly, providing efficiencies in time, effort and cost (Johnson and Onwuegbuzie, 2004). Data collection through questionnaires does have some limitations (Johnson and Turner, 2003). Thus, questionnaire data tend to describe rather than explain while the time to develop a quality questionnaire can be considerable. In order to deepen the descriptions, the questionnaires were supplemented by student teacher focus groups and individual teacher interviews. Observations were also carried out to strengthen the data. Time management was the key in this whole process of data collection to avoid unnecessary delays in conducting this research study.

5.6.1 Target Population

The target population for this study was 2000 students of ADE/B.Ed (Honours) undertaking a Functional English course and 100 English teachers who were teaching this course. Twenty-two Universities in Pakistan are offering B.Ed (Honours) programme, four of which are located in KP province. The ADE programme, on the other hand, is being offered in 75 Government Education Colleges in Pakistan.

5.6.2 Sample

One hundred and forty students studying Functional English in ADE/B.Ed (Honours) and their seven English teachers were selected as a sample, drawn from two universities and three affiliated colleges of Hazara Region of KP (province). The reason for selecting these two universities was that these were among the pilot institutions for B.Ed (Honours)/ADE programmes and the faculty of Education in these universities were actively involved in the curriculum development process. The two universities where Functional English course is being taught have been coded as 'University A' and 'University B'. For the ADE programme, three Government Colleges for Education were chosen, affiliated with these two universities (two colleges affiliated with University A and one with University B). The student sample, drawn from amongst the first semester undergraduate (student teachers) academic programme, involved 67% females and 33% males, reflecting the gender balance of the classes. Most of the student teachers were aged 20-24 while the majority of the student teachers were studying for the ADE course (80%). The remainder were studying for the BEd degree programme.

The five English teachers, who were taken as the sample, were currently teaching Functional English at ADE/B.Ed (Honours) levels in five sample institutions. Since the Functional English course was relatively new, there were only five teachers available who were currently teaching the new course in the sample institutions. In addition, two more teachers (one from university and one from college) who had taught this course in the previous semester were also approached. The aim was to compare their experience of teaching Functional English with special reference to fostering of critical thinking skills with the teachers currently teaching the same course. Details of the qualification and teaching experience of the teachers involved in the study are shown in Table 5.2. The actual names of the teachers have been altered to protect privacy.

Teacher	Gender	Designation	Institution	Highest Qualification	Overall Teaching Experience	Functional English Experience
Kareem	M	Lecturer	University A	MA (English), MPhil (Education)	7 years	First year of teaching FE
Saboor	M	Lecturer	University B	MA (English), MPhil (Education)	10 years	First year of teaching FE
Shabana	F	Lecturer	University B	MA (English), MPhil (Education), MEd	9 years	Taught FE previous year
Junaid	M	Instructor	College 1	MA (Economics), MA (English), MEd	19 years	Second year of teaching FE
Meero	F	Instructor	College 2	MSc (Mathematics)	11 years (mainly mathematics)	First year of teaching FE
Qadsia	F	Instructor	College 2	MSc (Zoology), MEd	Teaching college biology - 10 years	Taught FE previous year
Riffat	F	Instructor	College 3	BSc, MA (English)	Teaching sciences at High school - 3 years	First year of teaching FE

Table 5.2 Details of qualification and experience of the teachers involved in the study

5.6.3 Development of Questionnaire

In educational research, a questionnaire constitutes an important technique that is widely used to study attitudes, opinions, perceptions and preferences (e.g. Muijs, 2004). The three types of data about the respondents may be obtained from questionnaires: factual, behavioural and attitudinal (Creswell, 2003; Cohen, Manion and Morrison, 2007). The questionnaires of the current study were designed to include these three categories of questions. The factual questions asked pertained to the demographic characteristics like age, gender, level of education, previous grades in English, medium of instruction etc. The behavioural questions were asked to find out what the respondents have been doing or have done in the past. These questions were meant to seek information about respondents life style, habits and personal history. The attitudinal questions is a broad category concerned with what people think, their attitudes, opinions, beliefs and interests. In addition, situational and open-ended questions were also used. Open-ended questions provided the respondents with an opportunity to express themselves without being influenced by the researcher (Reja *et al.*, 2003) whereas closed questions limited the responses only to the set of alternatives offered.

The questionnaire development for this study followed a documentary analysis including National Education Policy of Pakistan (2009), Higher Education Qualification Framework (HEC, n.d.), BEd Curriculum and Functional English course guidelines (HEC, 2012a) in addition to the review of available literature. In the questionnaires, the semantic differential format allows very fast response rates giving large amounts of data while the

Likert approach offers considerable versatility (Reid, 2006). It was hoped that the situational set would offer useful insights along with a rating question. However, the open-ended questions provided diversity of responses and enriched the data. The following two sections describe the way the individual questionnaires for students and for teachers were developed.

5.6.4 Content and Structure of Student Teacher Questionnaire

One of the challenges in Pakistan is that researchers from numerous social disciplines use questionnaires and, therefore, students tend to be unhappy with their over-use. The problem is made worse by the fact that typical Pakistan questionnaires are very long, use only one format (Likert), and the answers often reveal little. The questionnaire used in this study, therefore, was much shorter, with multiple question formats, students finding this attractive. Many students made email contact afterwards seeking further involvement in the project. This was very encouraging as in Pakistan, in most research studies, students have little interest in further involvement.

The questionnaire for students involved six sections with 58 items using the Likert format (Likert, 1932), semantic differential format (Osgood, Suci and Tannenbaum, 1957), rating questions (Reid, 2006) and three open-ended questions. The full questionnaire is shown in the appendix.

The details of the content of the questionnaire are described in Table 5.2 (overleaf) which shows the questionnaire structure used in Phase-I. The questionnaire was identical in Phase-II except that the focus moved to the Functional English course.

	Sections	Description	Items
	<i>Demographics</i>	This introductory section included questions regarding the gender, age, institution, course, previous grades in English and medium of instruction.	6
Section 1	<i>English in everyday life</i>	The statements in this section were related to use of English in everyday life. Respondents had to rank themselves on semantic differential scale.	6
Section 2	<i>Intermediate English course</i>	This section is designed on semantic differential scale to study students' previous experience of learning English.	9
Section 3	<i>The way you like to learn</i>	Students were asked to rate themselves on a Likert scale describing how they would like to learn English.	8
Section 4	<i>English course completed in Intermediate.</i>	This section re-emphasises the previous experience of learning English with regard to development of student's critical thinking skills.	11
Section 5	<i>Reasons for studying English as a second language.</i>	Among 10 statements students had to tick all the reasons they think for studying English as a second language and development of critical thinking skills was one of the reasons mentioned in the statements.	10
Section 6	<i>Rate yourself on your ability in the following tasks in English</i>	This section explored the ability of students in performing different tasks in English. This section helped to compare the improvements in students before and after studying Functional English course.	8
Section 7, 8	<i>Open-ended questions</i>	To give students a freedom to express their opinion two open ended questions were added to explore additional information on their previous learning experience and to invite their suggestions for the better learning of English Language.	-
Section 9	<i>Invitation for focus group discussion</i>	Students were invited to take part in the follow up focus group discussion. Students were given Yes or No options and in case of their willingness they were requested to leave their email address and phone number so that they could be contacted for focus group discussion.	-

Table 5.3 Structure of Student Teacher Questionnaire

Embedded in the questions were items that specifically addressed the opportunities they had had to think and question and whether the course had helped them to think critically. The questionnaire did not address research question 1 which looked at student teacher perceptions of critical thinking in that it was thought unlikely that the phrase critical thinking would hold much meaning in Phase-I. The rating question was designed to explore the perceived abilities of students in the range of the language skills so that this could be compared with their perceptions towards the end of the Functional English course (Phase-II). The open-ended questions gave opportunities to see whether critical thinking had assumed a higher profile in what they enjoyed and wished from their Functional English course compared to their views in Phase-I.

5.6.5 Content of the Structure of Teacher Questionnaire

The questionnaire for teachers was designed to seek information about teacher perceptions of critical thinking, their expectations from Functional English course in terms of development of critical thinking skills of students and their opinion on the course guidelines. This questionnaire contained three sections with 29 items on Likert and semantic differential scales, following five demographic questions. Two open ended

questions were also included to gather additional information about critical thinking by inviting teachers' opinions and suggestions on Functional English course.

The following table contains the content of the teacher questionnaire (table 5.3)

	Sections	Description	Items
	<i>Demographics</i>	This introductory section included questions regarding the gender, qualification, institution, programme, teaching experience in general and teaching experience of English.	5
Section 1	<i>Expectations from functional English classes this year</i>	This section contained statements on semantic differential scale and was aimed to study the expectation of English teachers from Functional English courses. Moreover, this section explored the perceptions and expectations of English teachers towards Functional English course.	9
Section 2	<i>Reasons for teaching functional English.</i>	There were ten reasons given in this section and teachers had to tick the ones they thought appropriate.	10
Section 3	<i>Course guidelines for the functional English</i>	The purpose of this section, designed to include a Likert scale, was to explore teachers' perceptions and opinion about the course guidelines available to them.	10
Section 4, 5	<i>Open-ended questions</i>	Two open-ended questions were included for teachers to express their thoughts on the benefits of teaching Functional English and suggest one thing they would like to introduce in this course.	-

Table 5.4 Structure of Teacher Questionnaire

The questionnaire explored the research questions tangentially. While exploring teachers expectations from the Functional English course in Phase-I, the purpose was to see if they considered this course as offering any opportunities for fostering critical thinking (embedded in section 1,2,3). The questionnaire in Phase-II was designed to see if teachers' expectations were met.

5.6.6 Piloting the Questionnaires

Oppenheim (2001: p.48) states that '*everything about the questionnaire should be piloted; nothing should be excluded, not even the type face or the quality of the paper*'. A pilot was carried out with ten students and two teachers, who were not part of sample and they were asked to complete and comment on the questionnaire. The purpose of this pilot study was to identify any problems and to make sure that students and teachers will be able to understand the instructions and questions, this offering insight on face validity. As a result of piloting minor changes were made in the example given for completion of section 1 and 2 for the better understanding of teachers and students. For example, the instructions for the semantic differential question were modified and the revised format is shown:

Think of **English classes**.
Here is a way to describe your experiences.

interesting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	boring
relevant	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	irrelevant
easy	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	difficult

This means that you found the classes **fairly boring**, but the work was **very relevant** to your studies and was **neither easy nor difficult**

Moreover a preamble was also added for the students to be read by the researcher explaining the purpose and instructions for the completion of questionnaire. These changes enhanced student teacher understanding, thus enhancing the likely quality of responses.

5.6.7 Validity and Reliability

‘Reliability and validity are tools of an essentially positivist epistemology.’

(Watling, as cited in Winter, 2000, p.7)

Validity and reliability are two major criteria in determining the usefulness of instruments (Kember and Leung, 2008). Validity is the extent to which any measurement measures what it is intended to measure (Joppe, 2000). For example in seeking to measure the perceptions of students in relation to some aspect of their learning, it is important that there is evidence that the survey actually gives information about what was intended (Reid, 2011).

Trochim (2006) describes validity as the best available approximation to the accuracy of a given proposition, inference, or conclusion. In general, there is no easy way to measure validity statistically. One way is to compare the data from a new measurement to that obtained from a more established measurement. However, that was not possible here as no studies have looked at critical thinking in this specific context.

Kember and Leung (2008) consider construct validity as the best practical method for validating the instruments for course evaluation. According to them directness and authenticity were important construct elements taken into account when validity was considered in this study. The questionnaire was sent to several colleagues in Pakistan via email to see if the language is thought to be understood in the Pakistani context. In the questionnaires used here, the items were checked by several colleagues and refinements adopted. In addition, the questionnaires were piloted and there were discussions with the students involved to see if they had understood the questions in the way intended.

Creswell and Miller (2000) refer to three types of validity in relation to qualitative research study. These are called descriptive, interpretive and theoretical validity. Descriptive validity is the factual accuracy of the account reported by the researcher whereas interpretive validity is the degree to which the researcher understands the

feelings, viewpoints, thoughts and intentions of the participants accurately. Interpretive validity demands from the researcher to get into the heads of the participants and to feel and see what they see. This gives the researcher an opportunity to understand the perceptions and perspectives of participants and gives a valid account of the perspectives. The best strategy to achieve interpretive validity which was adopted in this study too is to seek participant feedback which is known as '*member checking*' (Creswell and Miller, 2000). This strategy was followed in this study and the interpretations of participant view points in Phase-I were shared during Phase-II in order to clear up any areas of miscommunication. Moreover, the report writing used the actual language of the participants (verbatim) in order to capture what was in their minds as far as possible. DeLuca (2011) calls this interpretive validity. Theoretical validity is theoretical explanation that develops from the research study and fits the data, thus, making it credible and defensible. Overall, the researcher spent sufficient amount of time in the field with participants to have greater confidence in the findings.

In looking at the study overall, validity was checked by comparing the outcomes obtained. Reliability is a measure of accuracy of measurement and, given the samples used and the conditions of data gathering, this is likely to be very robust. Although there is no guarantee, validity and reliability concerns were hopefully mitigated.

5.6.8 Data Collection

There are several different ways to administer a questionnaire (postal, face to face, telephone interview and paper pencil questionnaire) (Cohen, Manion and Morrison, 2007). In this study, the pencil and paper questionnaire was designed for its advantages as it provides enough time for thinking. Two separate structured questionnaires were developed for teachers and students for Phase-I.

The survey, in Phase-I, took place in the 1st week of October, 2013 which was just the start of new semester and Functional English course as well. The very first visit was made to one of the sample institutions after seeking formal approval of the Head of the institution and the teacher concerned. The researcher read the preamble and briefly explained the study to the students, followed by distribution of the consent forms and the questionnaires. The researcher remained available in case there were any questions from the students during filling of the questionnaires. The teacher was also present during the

session although the completed questionnaires were not seen by the teacher. Adequate time was allowed for completion: 25-30 minutes was needed. On completion, students were thanked and informed that they would be approached again with another questionnaire later in the course. All the seven teachers were approached one by one in their respective institutions. The plain language statement, the consent form and questionnaires were handed over to them to be filled at their convenience after giving them a brief description of the context of the study. They were given the email and residence address of the researcher so that they could return the documents in whatever way they wished. Teachers also shared their phone numbers in order to be contacted for the questionnaire in Phase-II. In Pakistani culture and especially in KP province, people are very warm and friendly and sharing personal details (email, phone number or home address) is a typical social norm, helping to create a bond between the researcher and the participants as they think they have been trusted for all this. This makes them feel comfortable and establishes a rapport. The researcher, being a female, had an advantage of gaining the trust of female participants and respect from male participants. All the questionnaires were received back within a week of distribution.

The second survey was conducted at the end of 1st semester Functional English course (Phase-II). All five institutions were visited by the researcher and the same procedure was followed for completion of the questionnaire. In this way, the return rate of questionnaires was 100% in both phases with both students and their teachers.

5.7 Qualitative Approach in Phase-I and Phase-II

In a sense, the quantitative researcher can disassociate himself from the research process more easily while the qualitative researcher embraces his role and involvement within research (Winter, 2000). Patton (2002) further adds to this notion and argues that the real world is not static, it is subject to change and a qualitative researcher must be present during this change to record the happenings before and after the change occurs. In order to confirm and expand what was found by means of questionnaires, the study employed interviews, focus groups and observation. The analysis of all these used a qualitative approach.

5.7.1 Participants in the Qualitative Study

Samples in quantitative research need to be large enough for valid inferences to be drawn so that deductions can be generalised for the whole population. Qualitative research, by contrast, cannot use such large numbers but those selected must reflect particular features of groups within the sample population (Ritchie, Lewis and Elam, 2003). For teacher interviews, the sample selected was the same as described in section 3.6.2. In the student survey, 130 out of 140 student teachers indicated their willingness to be involved in a focus group - far more than required. One focus group was formed from each of the five institutions, each group having 6-8 students. The selection was made by their teachers who were asked to choose students who were likely to be willing to express their views openly, irrespective of their abilities in the course. Although there is potential teacher bias, this seemed to be a better strategy rather than selecting students randomly which might have resulted in students being selected who were shy and hesitant. The aim was to gain the maximum information.

One lesson was observed in each of the universities and colleges, this lesson being selected by the class teacher on the basis of what was convenient for them. There were only five classes taking this course in the five institutions and time prevented observing more than one lesson. The observation took place around the middle of the course. This allowed classes to have settled into the style of their teachers and yet not to be too influenced by examination pressures. The aim was to observe a typical lesson to see if what they were doing was consistent with what they said they were doing.

5.7.2 Teacher Interviews

Frey and Oishi (1995) described the interview as a useful and powerful technique to investigate attitudes with numerous possible approaches: open-ended, highly structured, or with fixed questions. It gives more freedom and choice to both the interviewer and the interviewee to express their opinion freely and fully in their own words (Cohen, Manion and Morrison, 2007; Rodrigues, 2010). It provides rich data and sensitive personal information and this technique can be applied to almost everything.

Oppenheim (2001) describes two main types of interviews '*exploratory*' and '*standardised*' which can be seen as '*highly structured*' and '*unstructured*'. Indeed, it is possible to see interviews on a continuum of the extent of open-endedness (figure 5.3).

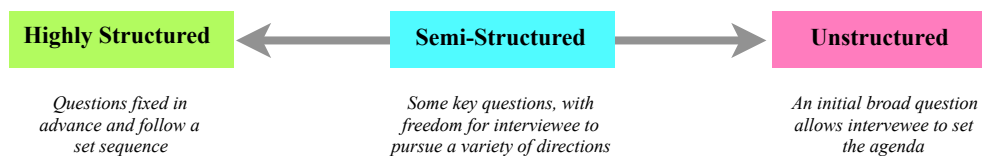


Figure 5.3 Interview Styles

In this study, semi-structured interviews were conducted. This gave the interviewer an opportunity to plan the key issues to be explored while allowing each interviewee the freedom to expand in whatever way they chose (Legard, Keegan and Ward, 2003). The semi-structured interview was thought to provide the greatest opportunity for free response while retaining some kind of control of the major issues to be investigated.

The teachers were contacted by telephone to fix a time for an interview at the start of Functional English Course (second week of October, 2013). The venue for the interview was set in their respective institutions to make the participants feel relaxed (Drever, 2003). After a formal introduction of the researcher, teachers were informed about the details of the research study and their rights to privacy and confidentiality. They were also informed that the interview was being recorded. If they wished, the transcriptions would be provided to them for confirmation before the next interview schedule of phase-II. Field notes were also recorded. The aim throughout was to exhibit a friendly and affirmative attitude towards the teachers to encourage them to be more open and expressive in their thoughts, showing trust in the interviewer (Rodrigues, 2010). All teachers except one preferred to be interviewed in Urdu (National Language).

The interview covered the following areas of the research study which were directly related to all the research questions set for this study:

- Introduction/ Demographics
- Background/ Teaching Experience
- Purpose and Goals of teaching Functional English Course/ expectations
- Perceptions of critical thinking
- Barriers and Facilitators in Teaching English and Development of critical thinking skills
- Policy, Curriculum and Assessment in relation to critical thinking skills
- The Practicalities in relation to critical thinking skills

Throughout the interview, non verbal tactics were also used like having eye contact with the respondent, nodding, glancing up occasionally, to read the facial expressions of the interviewee if he/she understood the question along with verbal tactics like encouraging the interviewee by saying 'Good' 'Right' 'I see' 'OK' 'Fine' 'That's interesting' and so on

(Drever, 2003). In accordance with what Crabtree and Miller (1999) mentioned the researcher also gave an '*attentive lean, eyebrow flash and sympathetic smile*' to make the interviewee feel he/she was being heard and understood. It took 60-70 minutes to complete each interview and it was ended with an expression of gratitude to the teachers. The teachers were requested to spare time for the second interview schedule to be held by the end of Functional English course to which they all gladly agreed.

The interviews were transcribed before the second round of interview schedule. The transcribed data provided a good deal of information about current status of English language learning, perceptions of critical thinking and expectations from the Functional English course. It also brought some issues which are to be further explored in phase-II interviews.

In phase-II, conducted at the end of Functional English Course in February, 2014, teachers were again approached for the second round of interviews. They were re-assured about privacy and confidentiality. They were provided with the transcription of their first interview, the aim was to allow them to confirm what they had said and to refresh their memories and also this helped them identify the difference in their responses of both the phases to track the changes over the semester. All teachers seemed very excited to see the transcription of their interviews. Identical questions were asked to explore if the Functional English course could come up to their expectations in terms of language learning and development of critical thinking skills. Moreover, certain areas identified in the transcriptions of phase-I were investigated in detail for deeper insight to them. Interviews were audio taped along with notes taken in the diary. At the end of the interview, all the interviewees were asked if they would like to say anything else which they think would be appropriate to add other than what they had been asked. Their feedback was also noted. All the interviewees were thanked and appreciation was expressed for their support and thoughtful insights.

Data gathered through interviews in phase-II were transcribed and compared with data gathered in phase-I. Interview data provided very rich information on teacher perceptions about fostering critical thinking skills through Functional English course, their expectations and the extent to which this course came up to their expectations.

5.7.3 Student Teacher Focus Groups

Focus groups offer an opportunity for a group to express their views freely, with appropriate dialogue and discussion but following the agenda of the researcher (Grudens-Schuck, Allen and Larson, 2004). However, it is not a conversation between the interviewer and interviewee. Instead, the researcher relies on the interaction among the group on a topic given by the researcher.

Hall and Rist (1999) noted some of the advantages of a focus group approach (eg. synergism, snowballing, stimulation, security, spontaneity, serendipity). However, there are disadvantages too. The quality of focus group data depends very heavily on the interactions between the group members and the skills of the moderator. It is quite possible for a group to be dominated by one member or to contain those who contribute little. It is here that the moderator can draw out those who are less confident, thus preventing the views of the group being dominated by one individual. In the current study, there is no risk associated with single data source because multiple tools have been used for data collection. Although the data recording was demanding, the focus groups turned out to be very exciting and stimulating gathering, giving an opportunity to capture student teachers thoughts related to critical thinking in some detail. In this study, the participants were given the liberty to express their views openly and argue among themselves, giving an opportunity to gather detailed insights of the issues under discussion. The research questions operated as a guide in planning what questions to discuss. However, there was opportunity to be flexible to explore other issues raised as the discussion developed (Cohen, Manion and Morrison, 2007).

The first round of focus groups was carried out in phase-I. These focus group sessions were arranged at the very beginning of the Functional English course and 6-8 students (selected by respective teachers) participated in each session. The following areas were explored in focus group discussions which were directly related to all research questions:

Introduction/ Demographics

Background/ English Learning Experience

Purpose and Goals of Studying Functional English Course/ Expectations from this course

Perceptions of Critical Thinking

Barriers and Facilitators in learning English and development of critical thinking skills

Policy, Curriculum and Assessment in relation to critical thinking skills

The Practicalities in relation to critical thinking skills

The purpose of the study and the focus group was explained to the group. The participants were informed that they were allowed to respond in any language as they wished and they could share personal experiences, they could agree or disagree with other participants and they could also re-visit previous questions, the aim being to provide a relaxed and comfortable atmosphere. The discussions were recorded in a digital audio recorder. However, detailed field notes were also taken down.

The transcription of the focus group discussions was extremely time consuming but, with the help of field notes, this task was successfully completed before the second round of focus groups. Keeping in view the ethical considerations, all the participants were given a number for reference. There were five groups and each group was coded as FG1 - FG5 and similarly each respondent had been referred as Participant 1, Participant 2....so on. For instance FG1 - Participant 1 means Group 1 and Participant 1. These transcriptions helped in assessing the areas which needed to be investigated further in Phase-II.

The second round of focus groups, in all the five institutions, was carried out on the completion of the Functional English course. The same participants were involved for both phase-I and phase-II. The researcher read aloud a summary of the responses of the participants in phase-I to refresh their memory. Like their teachers, students were also very excited to hear their responses of Phase-I. They found this summary helpful in comparing the difference between two phases. Identical questions were asked from the participants with the purpose to compare and record the significant differences and similarities between the responses of both phases. The students were asked how they found the Functional English course in relation to the development of critical thinking skills, how different the instructional procedures were, how did they find the quality of teaching, how well the course was managed, and if there was anything else they would like to suggest for this course in terms of teaching and learning outcomes. Everything was focussed on critical thinking.

The exceptionally warm response and active participation of the students is worth mentioning here. Students were warmed to the fact that a researcher had come with the aim of exploring the area of critical thinking. Their warm response may well have been influenced by their frustration over their past educational experiences. It is worth mentioning here that all these participants had also taken part in the survey conducted by the researcher and completed the questionnaire during both phases and gave their consent

for participation in focus groups. All these sessions took place in one of the classrooms made available by the staff of the concerned institution.

5.7.4 Classroom Observation

The following quotation is apt in the context of making observations:

‘If you want to know whether a man is religious don’t ask him, observe him.’

Wittgenstein (cited in Olson, 2008 p. 25)

However, in this study observation has been used as a tool to enhance and complement the data gathered by other sources. In other words, observing what goes on in the class may offer one source of genuine evidence about the extent of course implementation in the context of the aim of developing critical thinking. It has to be recognised that questionnaires, interviews and focus groups all reveal what participants think. Inevitably, data from questionnaires, interviews and focus groups can reveal how participants see the place of critical thinking in this course. Observations are better placed to indicate what is actually taking place in the learning situation. This can be seen as part of the entire process of triangulation.

Mulhall (2003) notes that there are two ways of using observation as a research method – structured and unstructured although it is possible to be an unstructured observer but record in a structured way. An unstructured observation schedule was followed for this research study during middle of the semester. It was thought that observation would extend the understanding of responses gathered through the questionnaire, focus groups and interviews. English teachers in all the five institutions were contacted on the telephone to fix a suitable date and time for classroom teaching observation. Permission had already been sought from the teachers through an informed consent form. Only one lesson of 60 minutes was observed in each of the universities and colleges due to time constraints, the lesson being selected by the class teacher on the basis of what was convenient for them. The role of the researcher was as a non-participant observer (Cohen, Manion and Morrison, 2007) and the lessons observed were entirely controlled by the teacher. A combination of the observation schedule and compilation of extensive field notes were employed during the observations carried out. The observations looked for evidence that the practice of the teachers reflected the course aims as set out in HEC policy and course documentation with reference to student-centred classroom, group discussion and so on.

The observations also offered a complementary researcher insight into the perspectives of students and their teachers.

The same students had already taken part in the survey and a group of students had also participated in group discussion and the researcher was made to feel at ease due to the warm and friendly atmosphere provided by the teachers and students during observation sessions. Before each observation, the focus and objectives of the research were outlined, with a stress that the observations did not involve any element of assessment or criticism. The teachers provided a lesson plan in advance and this helped in following the activities in class. During the group activities, with the permission of the teacher, a couple of groups were joined and here it was useful to identify teacher-student activities, doubts, confusions and the way the teacher addressed them in groups. Content, organisation of the lesson(s), interaction (teacher and student teachers) and link between English Course and development of critical thinking skills were the main areas being observed.

Several writers have mentioned potential sources of bias (Wilkinson, 2000; Robson, 2002; Shaughnessy, Zechemeister and Zechemeister, 2003). Among these are the possibility of selective attention by the observer, selective recording of observations, tending to see what was expected, and the fact that the presence of an observer may alter the dynamics of the learning situation. To avoid all these risks, all the details were noted down against the pre-determined themes. Full attention was paid to all the events, behaviour and activities in the class, recorded speech acts, non-verbal communication, description in low inference vocabulary and careful recording of the timings of events. An open and trusting relation had been generated due to past contacts in undertaking the questionnaires and surveys and this also helped in observing the participants in their natural class room environment.

In order to avoid the issues of reliability (Cohen, Manion and Morrison, 2007), the details of observation made during the class were converted into a comprehensive report before the next observation schedule took place in another institution. At the end of each observation, students, teachers and the head of the institution were all thanked for permitting the observation to take place.

The actual lessons observed were random and the selection of the topic being covered for observation was determined by the teacher concerned. Careful notes were taken during each observation and these were analysed in the same manner as interviews and focus

groups with the help of NVivo software. Although the observer kept a discrete profile throughout, the presence of an observer may have modified what was actually happening - although there was no obvious evidence for this.

5.8 Researcher as an ‘Insider’

This section offers a more personalised account of my role in the study. The project was set in the university system of Pakistan. Research activities are not well supported in most of Pakistani universities for a number of reasons eg. lack of physical and technical facilities, teaching work loads, no specific allocation of time for research activities etc. Under such circumstances it is very difficult to win the trust of the participants for taking part in surveys, interviews and focus groups etc.

I was adopting an ‘*insider approach*’ in that I was a part of the university scene in Pakistan. I have been working as deputy registrar in University A, dealing with the administrative issues related to faculty, students and the affiliated colleges. University B was initially a sub campus of University A, where I had served as campus coordinator/in charge for 3 years. This sub-campus was later declared as a separate university. Morse and Niehaus (2009) consider that it is not thought wise for an investigator to conduct a qualitative study in the setting where he/she has been employed as this dual status of employee and researcher may put researcher in untenable position. Coghlan and Brannick (2005) state that ‘*Insider*’ academic research has received relatively little consideration but they argue that ‘*Insider*’ research has its own dynamics that distinguish it from an external-researcher approach. Access, pre-understanding, role duality and managing organisational politics are the significant challenges mentioned by Brannick and Coghlan (2007). I had a huge advantage of working in both universities administration for several years. I could have access to and approach anybody in the organisation quite conveniently. My experience of running a university campus as a head helped me understand the general and research culture and politics prevailing in my sample institutions. As I was exploring a relatively new subject area, my participants did not feel threatened for their privacy and confidentiality and felt comfortable in sharing their thoughts when I approached them for questionnaires, interviews, focus groups and observation. Following the ethical considerations, I assured participants for their anonymity and confidentiality and sought their informed consent as well.

Although I was not involved in academic teaching in the university, I was, however, closely involved with the USAID project in an administrative capacity providing all the logistic support needed for the project and I actively participated in different workshops regarding curriculum design etc. for the B.Ed (Honours) programme. This gave me insights into the way these courses were being conceptualised. Indeed, my past background in teaching English drew me specifically to explore the role of critical thinking in the Functional English course. In addition, my background experiences allowed me to choose a sample easily, the sample being typical of the population undertaking the course in Functional English. Being familiar with the research approach of faculty and students towards stranger researchers, a convenience sample was considered more appropriate for my study. I delimited my sample only to Hazara Region of KP (Province), as mentioned earlier the BEd (Honours) programme was being run in four universities of Pakistan and I selected two among them which makes 50% of the total. These two universities on their own could have been a good sample but for detailed insights I thought it appropriate to include three Regional Institutes for Teachers' Education affiliated with the same universities. This enabled me to consider the general perceptions of university and college students. Both universities were located in Hazara region of KP which is relatively peaceful area as compared to other regions in KP. Being female and for security issues, I avoided including two other universities and colleges located at very sensitive areas of Province. Due to my affiliation and connections with all the head of institutions, teachers and students, I received enormous support from everybody in terms of participation and response. My '*Insider*' position allowed me to be trusted in a way sometimes not available to a stranger.

In Pakistan, relationships are very hierarchical and students have little scope for dialogue with their teachers. The project, by its very nature, gave scope for interaction between myself and students in that the questionnaire supervision was carried out by myself and there were opportunities for student-researcher interaction to discuss openly some of the issues related to critical thinking. Students really appreciated this and warmed to it. However, it does not fit the typical cultural expectations in university life. It was quite encouraging, albeit unusual, that I have been receiving calls and text messages from students and teachers showing interest in the progress of my project.

5.9 Ethical Considerations

Cohen, Manion and Morrison (2007) notes that research involving human beings has ethical implications and these were carefully considered before and during both phases of the study. To avoid any issues related to ethics, a formal application for data collection was submitted to the Ethical Approval Committee of the University of Glasgow College of Social Science in June, 2013. The purpose of the research, methodology and ethical considerations were explained to the ethical committee along with details of questionnaires, interview schedule, focus group and observation schedules. Permission was duly sought through informed consent from all the head of the institutions and head of the education department in Pakistan for conducting the research through emails. An informed consent form was designed for all the students and teachers participating in the research study. The consent letter contained all the information about the researcher, title and purpose of research project, participants and significance of this study. All the participants were adults and competent to give consent. The consent form stated the rights of participants, agreement to take part in this research study and the assurance of confidentiality and anonymity.

Participants were referred to with pseudonyms and codes, thus maintaining confidentiality. Each questionnaire was assigned a numerical code to keep the anonymity intact. In individual interviews with teachers and focus groups of students, all participants were given fictitious names and numerical codes. The researcher gave assurances to the participants that all data would be handled with total confidentiality and that none of them could be identified in any way. All the data including survey questionnaires, audio recording of interviews and focus groups, transcripts and observation schedule was kept under lock and key and the computer files were secured by a password. In compliance with the 5th Principle of the Data Protection Act, 1998 (CSSEAP, 2013) all the data will be destroyed on completion of the study.

5.10 Data Analysis

The questionnaires generated a very large amount of quantitative data and responses were gathered on a spreadsheet. The data were transferred to SPSS 19 to generate summaries of frequencies, taking care to check the entries at each stage (Cohen, Manion and Morrison, 2007).

The data analysis began with the teacher and student teacher findings from the questionnaire followed by their responses in their interviews and focus groups. Questionnaires were completed by the same participants in phase I and II. Therefore, the data from each student teacher and teacher questionnaire (*'before'* and *'after'*) was placed on one line of entry. Once the data was entered, the data were checked to ensure accuracy (looking for errors). In fact, when SPSS generates frequency summaries for questionnaire entries, it picks up extreme typographical slips (eg. 11 is entered instead of 1) which can then be corrected. When this process was undertaken, very few such errors were evident. The data is presented as percentages (for clarity).

It is important to weave the inferences drawn from questionnaires, interviews, focus groups and observations together to make a coherent whole (Atkinson *et al.*, 1991). Teacher interviews and focus groups were transcribed and translated into English. The transcripts of interviews and focus groups of phase-I were shared with the teachers and students before conducting Phase-II to seek their participant feedback. This practice helped to assure the quality of transcripts and made them ready for analysis. Un-structured observation schedules were recorded in five institutions. The data gathered from the five institutions were listed under four major categories: content, organisation of the lesson(s), interaction (teacher and students), and links between the English course and development of critical thinking skills. The most and least common aspects were extracted through analysis.

The qualitative data were sorted out under their relevant questions and were analysed by thematic analysis (Howitt and Cramer, 2005). Thematic analysis is the most commonly used method, among a wide range of qualitative data analysis approaches for identifying, describing and interpreting themes to offer 'thick description' (Braun and Clarke, 2006, p. 79), a description first used by Geertz (1994). The six stages of thematic analysis of familiarising yourself with your data, generating initial codes, searching for themes,

reviewing themes, defining and naming themes, and producing the report were being followed.

NVivo 10 software was used in this study for qualitative analysis, this being considered to add rigour to the analysis (Welsh, 2002). She notes that qualitative data analysis using software is sometimes considered to be based on a grounded theory approach but with NVivo, it is not necessary to follow grounded theory guidelines for analysis. Since the qualitative data were gathered by three different instrument (interviews, focus groups and observation), the data was potentially very rich. Once the data was transcribed, it was read and re-read many times to gain familiarity. Creating nodes in NVivo for the interesting features in a systematic way across the entire data was a cumbersome job. Data were collated under relevant nodes and sub-nodes. During the process of generating nodes, each data item was considered carefully. By employing the deductive approach the nodes were collated under potential themes. Themes were checked against the data many times to make sure that all the important information had been recorded accurately. The emerging themes were combined under major themes. Cross checking with the data was undertaken to ensure that the themes were consistent, coherent and distinctive. All the themes were then interpreted. Wherever needed, participants were quoted verbatim to illustrate the themes. The findings were discussed in a systematic manner leading to the conclusions.

The detailed analysis of themes and sub themes extracted from interviews, focus groups and observations will be presented in Chapter 6 and 7.

5.11 Conclusion

In this chapter the rationale of the methodology used in this study has been presented. The chapter began by stating the objectives set for the study. This study was conducted to explore the perceptions of teachers and undergraduate students towards fostering of critical thinking skills through Functional English courses in ADE/B.Ed (Honours). After a careful consideration the mixed method design was adopted in order to seek a better understanding of the research problem. Mixed method research design allowed the researcher to use the strengths and avoid the weaknesses of both quantitative and qualitative approaches. In addition data gathered thorough mixed methods could be triangulated thus increasing the credibility and validity of the results. After setting up the

research objectives and research design, research questions were developed followed by the research settings, participants and research instruments. The ethical implications of conducting research for the project were addressed by following the well established procedures. This further led to ethical considerations for the main study. Data was collected in two phases, phase-I was conducted in the start of Functional English course and phase-II was carried out at the end of functional English course. For the analysis of questionnaire data SPSS 19 was used, However, for the qualitative part of the study the technique of thematic analysis supported by NVivo was used to analyse the emergent themes. The detailed analysis of the data and findings are presented in the following chapters.

Chapter 6

Findings from Phase-I

I try to encourage people to think for themselves, to question standard assumptions... Don't take assumptions for granted... Make it justify itself. It usually can't. Be willing to ask questions about what is taken for granted. Try to think things through for yourself.

Noam Chomsky

6.1 Introduction

This chapter presents the findings from Phase-I at the beginning of the Functional English course, bearing in mind the injunctions expressed by Chomsky above. The findings are discussed under four broad headings: views of functional English course guidelines, perceptions of critical thinking, views of facilitators and barriers, views of policy and practice. However, before presenting the findings on these major themes, general insights from student teacher questionnaires, focus groups and interviews are summarised, showing how the students and teachers saw their previous English courses.

6.2 General Insights about Learning English and Intermediate English course

This section presents the findings regarding the students' previous experience of learning English with special reference to the concept of critical thinking. Before starting the Functional English course, the previous course for students was Intermediate English. As mentioned in chapter 2, in Pakistan, English is a compulsory subject from primary to undergraduate level and both teachers and students are aware of the importance of learning English. Responses to the questionnaires in Phase-I revealed that 71% students strongly agreed or agreed with the proposition that they enjoyed learning English previously (questionnaire 1, item 2a). However, only 19% students found it relevant to their other studies (questionnaire 1, item 2c). The majority of the students (54%) were satisfied with the way the course was taught to them with only 23% feeling not satisfied (questionnaire 1, item 2g).

One of the stated objectives of all English courses in Pakistan is to enhance the language skills of students. For 53% of the students, the medium of instructions in previous English courses was English. The questionnaire data showed that only 16% of the students felt confident in communicating in English after the Intermediate course (questionnaire 1, item

2f), although 26% did say that they were strongly encouraged to speak in English (questionnaire 1, item 2e). Although the students rated the Intermediate course as interesting and enjoyable, the low percentage (16%) of students who felt confident in communicating in English indicates that the majority of the students were not very positive in terms of their perceived learning, suggesting that the objectives set for the course were not fully achieved.

Focus groups and interviews provided students and teachers with an opportunity to expand and express their opinions freely on the importance of learning English in general and the outcomes of Intermediate English course in particular. It was noted that they expressed a wide range of strongly held views largely based on their own learning experiences.

While talking about the importance of English language learning, two students expressed the following opinions:

‘It is unavoidable to learn English because it’s a compulsory subject and we have to learn it’
(Participant 4, FG 1)

‘...our medium of instruction is also English.’
(Participant 3, FG 1)

These two students stressed the importance of English because it is a compulsory subject which they have to study and they cannot avoid it. Since the medium of instruction at university and higher education level is English, it is therefore important for students to have good understanding of all language skills.

In the focus group discussions, students emphasised the importance of English by using phrases like ‘a tool with which we communicate with other people’, an ‘official language’, a ‘key to success’, ‘language of the internet’ and, interestingly, a ‘status symbol’. However, one student teacher held a completely different point of view:

‘Well I don’t think English is important for us or for the development of our country. If we see China, Chinese people say that we have our own language and they don’t prefer English and they are ahead of America in development but the environment we have in Pakistan [here] we need to learn English to run our lives but I don’t think it necessary for development.’
(Participant 1, FG 1)

This does reflect a difficult issue facing the country like Pakistan where national identity is often related to a common language: Urdu. This is not a very realistic view given the lack of academic literature in Urdu as well as the dominance of English language. Other

participants of the same group also agreed that, ‘because all books are in English that’s why we [have to] learn English but if we are given [a] choice we shall prefer to learn [in] Urdu’. On the other hand speaking about learning of English, the teachers used phrases such as ‘to compete’ in the world and also to get ‘through an academic career successfully’. This highlights their views of the importance of English in an academic context.

While the teachers and students in general agreed that learning English is important, students of focus group 1 did indicate that they still preferred to study in their own language. Learning English places an extra demand on school students and undergraduates (Johnstone and Selepeng, 2001). Some students may have a general fear of studying a foreign language and may lack the confidence to learn and practice English inside or outside the classroom (Manan and Mehmood, 2015). This kind of fear may arise from previous negative learning experiences due to lack of trained teachers, in addition to having a social and family life where English is never used. This might make students rely on memorisation in order to pass examinations, and discourage the development of thinking as this will not assist academic success.

The findings from interviews and focus groups revealed that teachers and students saw English from different perspectives compared to teaching and learning in other subject areas. Based on their previous learning experiences, most of the students were of the view that the English class was generally all about content delivery with the aim of finishing the textbook. Thus, the students were constrained to exercise the only available option of memorising everything for reproduction in the examination. However, memorisation was noted to be a major characteristic of all their learning in most subjects:

‘It [Intermediate English] was all the same like other subjects, we were asked to memorise few things and reproduce them’

(Participant 6, FG3).

Nonetheless, one student teacher observed that,

‘It [Intermediate English] was taught to us differently.... we never used to call it as a subject we used to call it a language class’

(Participant 5, FG2).

Teachers considered teaching of English as completely different from teaching subjects like physics, chemistry and biology. One teacher noted that, ‘... we forget that we are

teaching a language and not a subject' (Saboor, M, MPhil) and another stated that, in teaching English, '...teacher's task is to make students learn all skills of language to communicate' (Shabana, F, MPhil).

Having looked at the general perceptions held by the students and the teachers in relation to their previous English courses, attention now turns to views about their expectations from the Functional English course and if they see fostering of critical thinking skills as one of the objectives for this course.

6.3 Student Teacher and Teacher Expectations from the Functional English Course

Phase-I data not only provides information on the previous experience of the students in learning English but also the expectations of students and teachers from the Functional English course which they have just started. The aim is to draw a comparison with their views at the end of the course (Phase-II). At the beginning of the course, both students and teachers had a long list of expectations from this course. It was interesting to learn that many students and teachers shared the same expectations, which are presented below in their own words wherever possible.

6.3.1 Course guidelines

The data from student teacher questionnaires could not offer much about the expectations from Functional English courses as it was meant to look into their previous learning experience of English courses. The teacher questionnaire (Phase-I), however, explored their expectations from Functional English courses. Although it is difficult to draw definite conclusions from the teacher questionnaire because of the small sample size (7 teachers only), the near unanimous kind of response to a number of items did suggest a high level of expectation (table 6.1):

N = 7	In agreement
The course design will encourages quality teaching	6
This course is strongly student-centered	6
The course involves much activity-based learning	7
The course is interesting to teach	6
I should like to use group work materials regularly with my students	7

Table 6.1 Teacher perceptions of course features

As discussed in Chapter 4 on documentary analysis, the Functional English course guidelines offer a clear framework expressing the goals (e.g. development of language skills and the wider skills including critical thinking) of the course as well as providing a large number of exemplars of activities that were considered to be useful ways forward in achieving the course goals with the students. The findings from interviews suggest that the Functional English course was very well received by teachers. The teachers even reported that the guide-lines were very ‘attractive’ and ‘interesting’ for teaching and learning. The very positive response may have been due to the fact that such elaborated guidelines had rarely been available in the past. This novelty seems to have caught the interest of the teachers and students. Riffat and Meero, though both science teachers, described the ‘curriculum’ and ‘course guidelines’ and ‘handouts’ as a source of ‘attraction’ for teaching this course.

‘I took it for my own learning because I found this course very interesting. It is different from old method of teaching that is translation method. The curriculum, course guidelines and handouts attracted me to teach this course....’

(Riffat, F, BSc)

‘...although I am teaching general science to the same class but my students always enjoy FE class and show high interest in this class because of its curriculum and course design.’

(Meero, F, MSc)

Although most of the teachers had previous experience of teaching, for many this was their first experience of teaching a course like Functional English. Due to the ‘interesting’ nature of course guidelines, Meero, Junaid, Riffat and Qadsia all volunteered to teach this course for their ‘own learning’. However, Junaid said that he was ‘naturally inclined’ towards teaching English; despite having his first degree in Economics, he had also completed a Masters in English as well.

6.3.2 Expectations of Enhanced Language Skills

Generally, the primary objective stated for the English courses is to enhance and develop communication skills in students. In the same way, one of the expectations from the Functional English course was also to enhance language skills of the students. The students were also very excited about the course and were hoping to become very fluent and confident in communicating in English:

‘Though we have just started this course but we can notice improvement in ourselves in terms of learning and communicating in English. So we expect a lot more improvement by the end of this course’

(Participant 2, FG4)

‘I would be able to speak and understand English well and in a better way. Overall my language skills will be improved.

(Participant 1, FG1)

It is obvious that the students expected improvement of language and communication skills as the main purpose of this course. This suggests that they might have in the course guidelines the opportunities to practice their language skills in this course. The teachers also shared the same view and saw the development of language skills as a major purpose of teaching the Functional English course.

‘I believe my students would be more confident in using English’

(Saboor, M, MPhil)

‘I expect ... the desired results of achieving adequate proficiency and strong bases in English language comprehension would become possible.’

(Kareem, M, MPhil)

The views of teachers and students actually reflect the fundamental purpose that is to develop language skills adequate to support their studies in other disciplines.

6.3.3 A Course Free from Textbook Prescriptions

One of the novel features of this course, as mentioned in chapter 4, was the absence of a prescribed textbook. For the Functional English course, the students liked the fact that the Functional English course was not tied to textbook completion:

‘...No textbooks mentioned, just course guide lines and relevant online links are mentioned which are very good source of learning.’

(Participant 5, FG 5)

‘In our previous experience the learning was textbook based like bookish type of knowledge...’

(Participant 3, FG 4)

The students found online resources and guidelines helpful for learning. Being released from a course that was entirely prescribed by a textbook was liberating for them. This was probably their first experience of textbook-free learning. The teachers, however, did not mention anything about absence of prescribed textbook although they were very positive about the course guidelines.

6.3.4 Student-Centred Class

As discussed in chapter 2, in Pakistan, teaching usually means one-way communication in the form of lectures by the teachers with little or no participation by the students. Speaking about the guidelines for Functional English course, Junaid noted the difference as compared to typical classroom room teaching approach when he said:

‘...it’s a paradigm shift from teacher-centred to student-centred.’

(Junaid, M, MA)

Further discussion revealed that he meant to say it is a shift from a very teacher-oriented class to student-centred class where students are actively involved in learning. Students also thought this course seemed ‘new and innovative’ because it gave them ‘opportunities to take part in different activities’. This is quite a different approach from previous teacher centred learning style. However, students at this stage never drew attention to this as a ‘paradigm shift’.

6.3.5 Scope for Fostering Critical Thinking

The students seemed to struggle with the idea of scope for critical thinking. There was tendency among the students to use various terms and phrases interchangeably with a lack of precision. However, they still saw this course enabling them to think rather than merely memorise. Typical comments recorded were:

‘We will be able to practice higher order thinking.’

(Participant 6, FG3)

‘I think apart from improvement in my language skills my thinking skills will also be improved’

(Participant 2, FG 2)

‘Overall learning is expected from this course in terms of knowledge, training and thinking’

(Participant 7, FG2).

It was interesting to note that most of the teachers were of the view that this course would be instrumental in fostering critical thinking skills among students. Two statements in the teachers questionnaire specifically explored teachers expectations regarding the scope of critical thinking in Functional English courses. (table 6.2 overleaf):

N = 7	In agreement
The course design will develop critical thinking skills	5
It helps students think critically	6

Table 6.2 Teacher expectations towards scope of critical thinking

The five teachers who were currently teaching this course were very much expecting that this course will develop critical thinking skills in students. Among seven teachers, six teachers were of the view that this course will help students think critically. On further investigation during teacher interviews two teachers specifically mentioned development of critical thinking skills:

‘Student will develop their language skills and CT [critical thinking] skills.’

(Meero, F, MSc)

‘Students’ [critical]thinking and language skills will be improved.’

(Riffat, F, BSc)

Teacher questionnaires and interview data confirms that teachers have high expectations regarding development of critical thinking skills through Functional English courses. Although the students’ comments on critical thinking were rather vague, they saw possibilities in the Functional English course for some kind of thinking element. The teachers, on the other hand, were able to be more precise. They did refer specifically to critical thinking skills and saw possibilities for their development. Nonetheless, there is no certainty about how exactly they understood the nature of critical thinking or critical thinking skills. The following section will present the finding on how critical thinking has been conceptualised by students and teachers.

6.4 Perceptions of Critical Thinking

The central focus of this study relates to the concept of critical thinking from the point of view of the students and teachers in relation to the course design and its delivery. In the light of Higher Education documents and the literature review (chapter 2 and 3), in this study critical thinking has been conceptualised as purposeful thinking. This way of thinking generates skills such as analysis, evaluation, weighing evidence, considering options, making judgements, all of which require appropriate questioning. Keeping in view this definition, it is important to begin with an understanding of how the students and the teachers conceptualise critical thinking in general and, more specifically prior to the

delivery of the Functional English course. The possibility of critical thinking being nurtured by means of their previous English course was explored among students tangentially through questionnaires and in detail through focus groups and interviews.

6.4.1 Students' Perceptions of Critical Thinking

Three questions (in questionnaire 1, Phase-I) explored concepts of critical thinking by focusing explicitly on the opportunities to think and question in the previous (Intermediate) English course (Table 6.3).

N = 140	Positive % Negative				
The course gave me scope for thinking	15	7	30	29	19
I was encouraged to think and question	24	27	31	14	4
The lecture course challenged me to think and to question	22	46	21	11	1

Table 6.3 Phase-I Student Teachers Views on Opportunities to Think and Question

A significant proportion of the students felt that they had been encouraged (51%) and challenged (68%) to think and question. However, very few (22%) students felt that their previous English course had given them much scope for thinking. Through an open-ended question, the students were invited to list any benefits they might have obtained from their previous course. In response, only 3% referred to 'thinking and speaking' in relation to their previous courses. Only one student teacher specifically used the phrase 'think critically'. However, it is difficult to interpret their expressions of encouragement and challenge as such. Nonetheless, it appears they did not see their previous course giving them many opportunities to think and question. The five focus groups and seven interviews discussed below gave an opportunity to explore these issues further. Later in Phase-II, comparison will be made how they felt at the end of the Functional English course as compared to their perceptions at the start of the course.

Student teacher focus group confusion about the nature of critical thinking

There was considerable confusion in the minds of the students when asked to state how do they conceptualise the term critical thinking. Two students admitted to not having any idea about critical thinking. The rest gave only confused responses:

'[Critical thinking means] to copy thought and ideas of others.' (Participant 8, FG2)

‘Critical thinking is definitely there in learning. For example, when a teacher is teaching, then the students do not understand him/her and say that this teacher is not teaching with good mood, or he is not explaining properly, so we don’t understand and get confused.’

(Participant 1, FG1)

Some students related critical thinking to the process of thinking per se, although this was expressed in diverse ways. Typical comments were:

‘[Critical thinking refers to] deep thinking, to go into the depth.’ (Participant 6, FG2)

‘To me critical thinking is an understanding of what to do, when to do [it], and how to do [it]. [It is] to make decisions and implement them.’ (Participant 2, FG3)

‘We relate our knowledge, we bring previous knowledge into our mind, relate it with present and then decide ... whenever our teacher gives us any situation during activity, we think of our experiences and compare it with classroom situation, then analyse and evaluate information and perform our activity.’

(Participant 5, FG3)

Another two students conceptualised critical thinking to be simply ‘different’, although they offered no ideas beyond that:

‘[Critical thinking requires a person] to think differently.’ (Participant 5, FG2)

‘[Critical thinking demands] see[ing] things and situations from different angles.’

(Participant 7, FG2)

They did not offer examples to support their answers, but they could see that critical thinking does not resemble what they perceived as the usual way of thinking although exactly what they mean is unclear. There is sometimes a predictable confusion between critical thinking and criticising in a negative sense. Thus one student teacher referred to ‘critical thinking’ being equated to ‘negative thinking’ and/or ‘criticis[ing] someone or something’.

Overall, findings from the focus groups suggest that students’ ideas about the concept of critical thinking showed considerable diversity. Of course, the idea of thinking holds high status in the mind of students and it is unlikely that students would ever describe their past learning in terms of lack of thinking. This is probably a useful interpretation of the questionnaire data. However, the findings reveal that the students at the start of the Functional English course had very general ideas about critical thinking. For most, it carried positive connotations while others confused it with criticism.

In the review of the literature (Chapter 3), it was suggested that productive questioning is the principal underpinning of the skills (eg. analysis, evaluation etc) that constitute critical

thinking but the students seemed unaware of this fact. One student, however, did speak about thinking and questioning:

‘If we encounter any sentence or statement, which is not in accordance to what we have been taught, then we think and question, and ask our teacher if it is right or wrong’.

(Participant 4, FG1)

The statement does imply the realisation of some kind of connection between thinking and questioning.

Overall, there is some evidence that students are aware of some of the skills that are seen to constitute critical thinking: for example, two students specifically mentioned analysis and evaluation while one student teacher referred to looking at things from different perspectives, implying some kind of judgement or weighing of evidence. Another student teacher focussed on making decisions and implementing them and saw critical thinking as a way of deciding what to do, when and how. Thus, the conceptualisation of critical thinking at the outset of the course were inevitably somewhat imprecise, when compared to the definition used in this study which is based on the literature.

6.4.2 Teachers’ Perceptions of Critical Thinking

Unlike the student teacher questionnaire, the teacher questionnaire did not cover their experience of teaching Intermediate courses because not all of the teachers had taught at higher secondary level (grade 12) where the course is offered. The teachers were teaching at undergraduate level either in universities or in colleges where undergraduate programmes were offered. However, they shared their thoughts on the Intermediate course during interviews based on their own learning experience. The teacher questionnaire in Phase-I explored teachers’ expectations from the Functional English course and five questions specifically focussed on thinking and critical thinking among many other expectations listed by the teachers. Thus, the vast majority of the teachers agreed with the statements as shown in table 6.4.

N = 7	In agreement
The course will develop critical thinking skills	5
This course focusses more on thinking skills	7
I should have liked more opportunity to encourage my students to think	7
I want to encourage my students to question and challenge	7
It helps students to think critically	6

Table 6.4 Phase-I Teacher Views on Opportunities to Think and Question

The above table shows that all the 5 teachers who were currently teaching Functional English course (in five institutions) expected the Functional English course to encourage critical thinking skills in their students and they supported this. Specifically, all 7 teachers expressed the view that they wanted to encourage questioning and challenge for their students. This suggests that, for these 7 teachers, their attitudes do not constitute a problem in the development of critical thinking skills.

Diversity in views about the nature of critical thinking

The perceptions of the seven English teachers about critical thinking were explored further through detailed one-to-one interviews. The participants expressed diverse views about the nature of critical thinking. Almost all the teachers recognised the importance of critical thinking skills and considered it vital for achievement at degree level, as one of the teachers specifically mentioned:

‘We Pakistanis need CT [critical thinking] more than others and we should make our students tolerant, accepting each other.’

(Saboor, M, MPhil)

Teachers described critical thinking as an ability ‘to judge’, ‘to weigh’, ‘consider’, ‘analyse and evaluate’ in the process of reaching ‘long lasting conclusions’, ‘to assess a topic and accordingly add, delete, omit etc.’. These words and phrases occurred frequently in the teacher interviews. They used a variety of phrases but they appeared to comprehend critical thinking as something where ideas and information are challenged and questioned in order to arrive at acceptable conclusions.

Kareem had a very detailed insight:

‘I understand critical thinking as the thinking capacity of an individual to discern and distinguish between good and bad, what to believe and what not to believe, identify the problem, thinking of more and more possibilities and solutions, discarding the irrelevant and picking up the most relevant stuff to solve the problem, and in short, it is the refinement of thinking in general that enables the thinker to think [at] higher levels beyond personal biases, prejudices and judgements.’

(Kareem, M, MPhil)

This has identified the challenges of ‘*personal biases, prejudices and judgments*’. Possibly, Kareem was aware that human understandings and decision-taking are often clouded by individual biases. He appears to be arguing for a more careful and objective weighing of evidence as some kind of antidote to human prejudice. He sees critical thought very much in terms of discernment: weighing evidence, distinguishing between

possibilities and solutions while being prepared to select and discard on the basis of what is relevant for the task in hand.

Others also offered useful insights

‘.....my understanding of CT [critical thinking] is to have conceptual learning.... to analyse, evaluate, compare the information and then come to some conclusion’.

(Meero, F, MSc)

‘It is kind of higher order thinking, where a person just not focus on what the things are and ask why and how they are, reflect on things happening around .’

(Qadsia, F, MSc)

These comments show that the teachers had some understanding of the evaluative nature of critical thinking. This involved not simply accepting things as they appear to be but asking productive questions of the information. Qadsia (F, MA) noted that, ‘critical thinking means the ability to assess the information you have and to look at it from different angles and different points of view’ and ‘to think out of the box’. This idea is very similar to the concepts suggested by Paul and Elder (2001) and Halpern (2007). In a sense, this means considering information, its source and its meaning, and weighing carefully the interpretation and significance. Typical comments included:

‘... whatever it is, knowledge or information and from whatever source we get information, we should not be accepting it passively and we should not be rejecting it altogether. We should be in a position to weigh, consider, analyse and evaluate it. As an independent learner, we should reach conclusions by ourselves and these conclusions should be long lasting.

(Saboore, M, MPhil)

Overall, the teachers had a more informed view of the nature of critical thinking. They could see it in terms of evaluating knowledge, understanding and interpretation. They recognised and understood the importance of critical thinking with weighing, considering and evaluating as an important and integral part of it.

6.4.3 Expectations towards Teaching, Applying and Evaluating Critical Thinking Skills

In phase-I, interviews were conducted when the teachers were about to undertake the Functional English course under the new guidelines which included critical thinking as an important element. During interviews, the teachers were asked about how they envisaged critical thinking skills being taught and developed. There was also a brief discussion on how they expected their students to apply critical thinking during the course and how they might evaluate its development among students. Similar questions were put to the students in their focus groups but seen from a learner's perspective as well as a prospective teacher's perspective. It is important to investigate how students would like critical thinking to be taught to them and also how teachers would like to undertake the teaching of such skills. This would help in finding out what might be helpful in the teaching and learning of critical thinking. Eventually, this will help to determine the facilitators and barriers as perceived by teachers and students in seeking to foster critical thinking skills.

The design of the questionnaires in Phase-I could not provide any information on the teaching of critical thinking skills but focussed on previous learning experiences in relation to critical thinking. However, the focus group data provided insights on the possible and expected ways of teaching critical thinking skills. These issues are now discussed.

Student Teacher and Teacher views on fostering critical thinking skills through class activities

At the start of the Functional English course, all the student teachers had the course guidelines. Thus, they could see the overall structure of the course and the classroom activities mentioned in them. Therefore, during the focus group discussions, two students (prospective teachers) specifically mentioned how they might teach critical thinking through activities:

‘I think we can teach CT [critical thinking] through different activities where students could think and decide and then respond according to their thoughts.’

Participant 5, (FG2)

‘We can teach [be taught] CT [critical thinking] through group activities.’

(Participant 1, FG2)

The students could see the importance of being involved in activities which would give them scope to think and decide (see chapter 4 on course guidelines and activities). All the other participants of the same focus group agreed with what these two students said. Students think that for teaching critical thinking skills it is important for teachers to be:

‘well aware of these skills....only then they would be able to teach us well’

(Participant 1, FG5)

The group members also mentioned a strategy for teaching critical thinking skills: teachers must ask for student feedback on their teaching methodology where students could tell teachers ‘what is good and what is bad’. The students must be provided with an opportunity to ‘analyse’ and ‘think critically’ before responding to such questions. We would see this as course feedback or evaluation.

Similar views were expressed by the teachers on the role of activities in fostering critical thinking skills. Here are two comments:

‘We can teach it through group activities where students discuss and evaluate and share ideas with each other and that is how they learn.’

(Junaid, M, MA)

‘...by using various techniques, like brain storming, concept mapping, interviewing etc.’

(Shabana, F, MPhil)

The teachers were able to see the need of opportunities for the students to work together, to discuss, brainstorm and develop skills of evaluation. One common feature that emerged from both student teacher and teacher responses in the focus groups and interviews was the role and importance of classroom activities and practice. They suggested engaging students in ‘group activities’ with some guidance provided by the teacher for the given task to help expose students to ‘problem solving methods’ where they ‘have to find a solution on their own’. Two of the teachers specifically mentioned their strategy for teaching critical thinking skills would be ‘teaching through practice’ as this would provide students with the opportunity to ask questions: when ‘they question a lot, they think a lot.’ It seems that both students and teachers saw group activities as providing such opportunities where there is scope for thinking about the material being studied.

After exploring the thoughts of teachers and students (prospective teachers) on how they could develop critical thinking skills through teaching and learning of Functional English course, the next step was to explore how teachers and students (prospective teachers) considered critical thinking being applied and how its development might be evaluated.

Implicit application of critical thinking skills

In response to the question about how students might apply critical thinking, students offered very little except one student teacher [Participant 1, (FG3)] who commented quite reflectively:

‘In every walk of life, when we are interacting with people, we compare their different expressions; we make comparison among different environments, even during exams critical thoughts come to our mind. We think that which question should I attempt.’

At this point, the researcher prompted the group with the suggestion that they might have used critical thinking skills without realising it, at which point they all laughed and said ‘No, we never realised it before’. One student teacher then remarked:

We have been practicing thinking skills but we never knew that this is CT [critical thinking].
(Participant 1, FG 3)

This illustrates the confusion among students where critical thinking is almost equated with thinking. Nonetheless, it does reveal that students are positively disposed towards thinking (or critical thinking) despite their past educational experiences which tended to be textbook-driven exercises in memorisation.

Explicit application of critical thinking skills

One of the teachers highlighted the importance of questioning and self-evaluation and noted that:

‘Critical thinking would be developed when you give them [students] opportunity and welcome their response. They would be understanding and be able to judge when they are mistaken and able to correct themselves, so we should give them chance and we as a teacher use it as a strategy.’

(Saboor, M, MPhil)

Saboor is perceptively aware of giving the students opportunities ‘to correct themselves’ following an analysis of their responses. This requires teacher empathy in encouraging students to respond to questions and this provides one way to encourage critical thinking skills: put the students in situations where such skills can be practiced and are seen to be useful.

Although teachers and students views on the nature of the critical thinking varied considerably and one teacher expressed the importance of critical thinking somewhat optimistically in the following words:

‘The students who are trained in critical thinking can apply the learnt skills later on when opportunities arise. They apply the critical thinking in almost all aspects of life as the educated can be distinguished from the non-educated by their approaches in thinking. They apply critical thinking in their academic areas via their writing, oral presentations and decisions about their careers, personal and social life.’

(Kareem, M, MPhil)

The teachers appreciated the importance of learning situations where critical thinking was considered valuable and encouraged through the practice of relevant skills in a supportive environment.

Evaluating critical thinking skills through activities

The role of activities and group work was perceived as important and one student teacher specifically referred to it:

‘Group tasks and individual tasks can also be used to evaluate critical thinking skills.’

(Participant 2, FG 5)

‘... sometimes in group somebody doesn't participate so individual activity is good to evaluate critical thinking skills.’

(Participant 6, FG 5)

Bearing in mind that these students are prospective teachers, it can be gathered from their comments that they see activities providing opportunities to evaluate if the learner is using critical thinking skills. However, this does rely on participation by all students. While the students overall saw group work stimulating critical thought, it has to be recognised that some students prefer to work on their own and tend not to be active participants in groups.

Teachers also commented:

‘By questioning or by giving tasks to students. The facial expression of students tell us if they have understood and apply critical thinking skills.’

(Meero, F, MSc)

‘We can judge [evaluate] it from the way students respond during the activities.’

(Riffat, F, MA)

These two teachers thought that they could ‘judge’ if the students were able to comprehend. This may be called the application of critical thinking skills by observation. While a sensitive teacher may be able to discern what goes on in the minds of the student from the overt activities but there will always be some students who might be thinking critically without any outwardly perceptible speech or action.

Having considered the perceptions of teachers and students in relation to critical thinking, its nature and possible ways to encourage it, the next section looks at the factors that might help or hinder the development of critical thinking skills.

6.5 Facilitators and Barriers Perceived by Student Teachers and Teachers

The section looks at the likely factors as perceived by teachers and students that might assist or hinder the development of critical thinking skills during the conduct of Functional English course. Although the word ‘facilitator’ normally focusses on people but, in this section, the word is used for a wider range of factors that might facilitate the development of critical thinking skills (see chapter 3). Since the absence or removal of a barrier can be seen as a means of facilitating goal achievement, the barriers and facilitators are discussed together in this section, being seen two sides of the same coin. In this regard, the teachers are the major source of information as they have the responsibility of implementing the course guidelines within the constraints of the teaching situation. However, the perceptions of students are also important as there may be facilitating or hindering factors which can only be visible from their perspective.

The questionnaires were not designed to explore this issue because it would have been difficult for the students to foresee possible facilitators and barriers in the development of critical thinking in advance of undertaking the course. Hence, the students would be unable to offer any useful insights. In the light of the above, the teacher interviews and the student teacher focus groups of Phase I and II constitute the main sources of evidence relating to the likely factors, facilitating or hindering, the development of critical thinking skills. In fact, the insights from students and teachers were remarkably similar. These insights are now discussed against the background of previous findings.

6.5.1 The Role of Teacher

The teacher’s contributions are important for making the outcomes favourable (positive) or unfavourable (negative). As discussed earlier a teacher can stifle critical thought not only by how they teach but also by withholding from students the opportunities and rewards for critical thinking. The teachers in the present study seemed well aware of their role and were very committed to giving their students quality learning experiences.

Reflecting on the role of the teachers, the students expressed a variety of views describing the role of the teacher as both the ‘facilitator’ and a ‘barrier’. Their comments are presented here. One key word that kept appearing in the views of the students was ‘encourage’ and the role of the teacher in this regard was considered vital:

‘Teacher plays a major role in developing thinking among students by encouraging them and appreciating them.’

(Participant 4, FG 4)

‘When teachers encourage students it makes them confident to share their thoughts without hesitation’

(Participant 2, FG 4)

‘I think the biggest hindrance is discouragement. When we respond to our teachers using our own critical thinking instead of making corrections, they discourage us to respond and say you are wrong. This attitude of teacher discourages us from responding in future. With this fear that we might be wrong this time again we hesitate and it stops us from responding.’

(Participant 1, FG 3)

‘Sometimes it happens in class that teacher encourage us to respond but class fellows make fun of the mistakes of respondent student and next time every body gets conscious and hesitant of speaking or responding in class.’

(Participant 2, FG 3)

‘Our teachers involve us in different activities. They ask questions and keep our interest alive in class.’

(Participant 5, FG 2)

From the comments above, it is clear that teacher encouragement is important and this is reflected in a natural fear on the part of students of being put down by an authority figure or even by their own peers. The last statement is valid not only in relation to questioning but also in relation to participation in a range of activities. Questioning and involvement in activities may be a feature of a good learning environment in order to encourage critical thinking.

For this course, teachers saw their role in ways that are different from the more typical pattern in Pakistan. When they were asked about their role in the development of critical thinking skills of students, all the teachers reported that they liked the idea of being a facilitator.

‘My role is quite positive in building critical thinking skills, making them[students] learn how to answer, how to cope with difficult situations, how to decide, judge and evaluate.’

(Shabana, F, MPhil)

‘I think a teacher’s role is great and especially in developing critical thinking.... all the [teaching] methodologies do not worth if they are not in the hands of a proper teacher.... a good teacher can use lecture method for teaching critical thinking. Why not to use a lot of questioning during lecture method and why not we should give our students time for discussion so a good teacher for me can really develop critical thinking skills.’

(Saboor, M, MPhil)

The teachers appreciated the course design which encouraged teachers to go beyond the conventional method by adopting a more democratic style of teaching. However, Saboor was perceptive enough to appreciate that even lecturing offered scope for fostering critical thinking skills. No matter what strategy is applied, it is important to develop confidence and a sense of ease among the students. It is very important that students must always be encouraged to respond in the class. Most of the students were somewhat reticent to participate, fearing being mocked by their friends or, in the worst case, by their teachers in the class for being incorrect (see student teacher comments above). All the teachers were well aware of this fact and they acknowledged the role of Functional English courses in making teaching and learning both interesting. Very positively, Riffat commented,

‘I never discouraged them [students] at all. Have always made them heard no matter right or wrong but I let them respond.’

Sometimes, student perceptions of what might happen over-rule the reality of what does happen. This can hinder student participation for fear of some kind of rejection. This apprehension can develop because school education in Pakistan discourages open participation, with a good class being seen as a place where there is pin drop silence (see chapter 3). One possible disadvantage in developing greater student participation relates to the challenges of coping with large classes and concerns were expressed about student numbers:

‘... class is overcrowded and it is difficult to manage group activities and marking their assignments’

(Meero, F, MSc)

The above section emphasise the importance of the role of the teacher as experts who can become role models while being in a position to encourage and support students in the development of a wide range of skills. However, teachers did express concerns about the students entering their courses. At every level of education, it is easy for teachers to criticise the previous level. However, the emphasis in the Functional English course was placed on wider educational skills which are largely ignored in school and college courses. This is discussed in the next section.

6.5.2 Students' Background

In addition to the factors mentioned above, teachers raised the issue of the social and academic background of the students. Teachers considered this issue both as a potential facilitator and barrier.

Academic and Social Background

All the teachers indicated that academic and social background of students was one of the major factors affecting their learning in general and development of critical thinking skills in particular. In making comparison of the academic background of the students coming from both government and good public schools (eg. Beacon House School), Saboor observed:

‘Definitely education background affect their learning. For example students from government schools are far [more] different from those who are from Beacon House schools etc in terms of their English language. It’s like people who have never been exposed to language in comparison with those [who] had every opportunity.’

(Saboor, M, MPhil)

‘Lack of confidence, not asking questions in class (not encouraged to do so), weak academic background hinder the development of critical thinking.’

(Junaid, M, MA)

This may relate to what goes on at school level where the private English medium schools tend to attract the more able students while the Urdu medium government schools end up with weaker students. This results in a divided intake into universities. Another area which teachers identified very strongly was the lack of background language knowledge, coupled with weaknesses in the use of language for communication purposes. This led to low student confidence levels when it came to asking questions or communicating orally in the language.

Apart from the issues mentioned above, a very typical challenge that our female students face is the domestic pressure in the form of additional workload that hinders learning. As one of the female students mentioned:

‘Sometimes domestic obligations also hinder our learning because we can not give enough time to our studies. Like when my mother was ill I used to go back home and had to do a lot of work in the kitchen which affected my progress in class.’

(Participant 4, FG 4)

In many of the middle class families, as a part of culture, girls are required to do all the household chores along with their studies whereas boys spend more time in the outdoor

activities. Many of the female students were of the view that boys have more exposure to the outer world with better opportunities to learn from the practical life. Girls are normally not encouraged to be exposed to outside world as their parents feel less comfortable due to security and overall cultural restraints. Overall, a good academic background plays an important role in being successful at higher education level leading to a good professional career. The students who are less fortunate and who then start further studies at good educational institutions face many challenges in seeking to keep up with fellow students, often resulting in a lack of confidence.

6.5.3 Assessment Criteria

Since students had just started the course, both teachers and students were not able to comment on the assessment criteria set for BEd and Functional English course. They shared their views on the assessment system they had experienced during their previous courses. The previous examination system was one of the major hindrances in learning and developing their critical thinking skills.

Encouraging Memorisation

Based on their previous experience students shared the following views:

‘We haven’t been examined so far because we have just started this course...[but] If we consider our previous examination system then that system encourage[d] rote memorisation.’

(Participant 2, FG 5)

‘we used to memorise.... so I don’t think earlier examination[criteria] was helpful.’

(Participant 2, FG 1)

The previous courses were more about the content coverage resulting in memorisation of the content in order to reproduce it in examination and pass. Students had a feeling that there was no choice. As participant 5 (FG2) stated, ‘We are [were] forced to memorise to pass examination.’ On further enquiry about being forced they stated that they felt under pressure to pass the examination. They felt that the pressure came from parents, family, teachers and friends and the fear of the shame they might bring to all of them if they fail. They interpret this pressure as being ‘forced’ to memorise. One teacher indicated that:

‘...learning through rote memory hinders critical thinking. Our examination system and teachers’ methodology supports rote memorisation.’

(Saboore, M, MPhil)

Almost all the teachers expressed the same views and considered the previous assessment criteria as a major hindrance in fostering critical thinking. The students also highlighted the issue of ‘spoon feeding’. They explained spoon feeding in the following words:

‘Spoon-feeding like when teacher hands over the notes and ask to reproduce them. It definitely hinders our learning because we do not think much and just memorise those notes.’

(Participant 5, FG 4)

‘Spoon feeding hinders the development of critical thinking. It does not allow us to think .’

(Participant 5, FG 2)

There was a consensus among teachers and students on the nature of the previous assessment criteria that encouraged memorisation rather than learning. The issue of ‘spoon feeding’ was also highlighted by the students. It was interesting to note that students realised that this kind of assessment and examination system hindered their learning. None of them approved of such an examination system. However, their introduction to new forms of assessments made them notice the difference between the two systems and raised their expectations that the new examination system will provide them with opportunities to enhance their learning by thinking. Teachers and students both were anticipating that the summative and formative assessment involved in the Functional English course will enrich their learning.

6.6 Policy and Practice

Having looked at The Functional English course, it is now important to consider it along with other courses. The curriculum is a basic component of education at all levels and Higher Education policy advocates the development of critical thinking skills during the course of study. However, no guidance is given about how to do this nor is any training provided.

The Functional English course was a newly designed course for BEd degree at honours level, with detailed course guide lines provided for teachers. Keeping this in mind when the teachers were asked to comment on the purpose, design and the course policy, they all unanimously found this course ‘very interesting’ and acknowledged the efforts of the Higher Education Commission and USAID in designing this course.

Although there was much appreciation for the course design and positive approach of the Higher Education Commission (HEC) towards learning, in the current interviews, most of the teachers emphasised the need of regular training, with workshops provided for teachers.

‘I would like to suggest not something to teachers but to policy makers that they should arrange different training for teachers because until and unless teachers are trained to teach, we would never be able to achieve the objectives of any policy.’

(Saboore, M, MPhil)

‘.....Due to lack of teachers’ trainings the objectives of the policy are not being achieved.’

(Junaid, M, MA)

‘Teachers can bring change in Education System but teachers should be offered different trainings.’

(Riffat, F, MSc)

The above responses show that for most of the teachers, successful implementation depends not only on course design but also on teacher training. The successful implementation of the course could be assessed by the performance of students in the class which is evaluated by the teachers themselves. All the teachers were well aware that the main objective or the purpose of the Functional English course was to enhance the language skills of the students and they were expecting improvement in the language skills of their students.

6.7 Summary

This chapter has aimed to present an overview of the findings from Phase-I, at the start of the Functional English course. The purpose of Phase-I was to explore the perceptions of students and teachers about critical thinking and perceived barrier and facilitators in the context of their previous learning experience. Phase-I also explored students’ and teachers’ expectations from Functional English courses. The findings revealed that both students and their teachers started with high expectations and the course guidelines were welcomed along with the freedom from the control of textbook and the opportunities the course seemed to present to enhance language skills, with more student participation. Specifically, both groups saw scope for the development of critical thinking although how they saw this is not so clear. Overall, the students’ conceptualisation of the nature of critical thinking can be described as hazy while the teachers were more aware of the

nature of critical thinking but tended to see this in terms of skills they associated with critical thought. Both groups saw the role of questioning although, again, the nature of the questions was somewhat vague. All of this is entirely to be expected given that the students and teachers probably had never experienced the way of questioning and analysis that is an integral in thinking critically during their educational journey in Pakistan.

The teachers expected that the course would offer opportunities to encourage critical thinking and were positive in their views that this was a desirable goal. Students simply wanted the freedom to think and this probably reflects the stultifying effect of their previous courses which had been built around set textbooks with content to be covered, memorised, recalled and reproduced in examinations. Both groups were aware of the key role of the teacher in offering examples of critical thinking and encouraging students in an unthreatening atmosphere. However, the students were particularly aware of their experiences of the way examinations controlled what happened in teaching and learning and were looking forward to the greater freedom that their semester system seemed to offer, along with the emphasis apparent in the course guidelines.

Care has to be taken in drawing too many conclusions from this overview in that it is clear that the conceptualisation of critical thinking with both groups was diverse in nature. The interesting question is how their views developed as a result of the course and whether their conceptualisations had changed further. This is the theme of the next chapter.

Chapter 7

Findings from Phase-II

If there was one life skill everyone on the planet needed, it was the ability to think with critical objectivity

Josh Lanyon

7.1 Introduction

This chapter presents the findings from Phase-II (towards the end of the Functional English course) and the observations (during the course). The purpose of Phase-II was to build on Phase-I, which explored the previous teaching and learning experience of teachers and students and their expectations from Functional English course. The present chapter gives an opportunity to see the extent to which the perceptions at the end of the course are supported by the observations made during the course. Thus, the following sections synthesise the major findings from the teacher interviews and students focus groups, supported by questionnaire data along with data from observations.

7.2 Learning Experiences with the Functional English Course

This section presents the findings on perceptions of teachers and students related to how their expectations worked out in practice during the Functional English course. In Phase-I, at the start of the course, when students and teachers were approached with this question, they mentioned high expectations from the Functional English course. They were of the view that this course would develop their language skills, make them confident in communicating in English and also enable them to think and help fostering critical thinking skills. Having almost completed the course, the question arises about the extent to which the course met the expectations of both students and teachers.

7.2.1 Course Guidelines

Some findings from the student teacher questionnaire (Phase-II) are presented first. The questionnaire in Phase-II focussed on students' learning experiences in the Functional English course. This provided an opportunity to compare the perceptions of students of Phase-I and Phase-II. The data from some relevant questions are now summarised in Table 7.1. These data were gained towards the end of the Functional English course.

N = 140	Positive		%		Negative
I enjoyed the classes	56	32	8	0	4
I found the work demanding	49	34	12	3	2
The work was relevant to my other studies	34	15	16	12	23
I was encouraged to speak in English	63	19	12	4	2
I feel confident in communicating in English	15	36	28	14	8
I liked the way the course was taught to me	57	24	11	3	4
I found the course interesting	46	39	11	0	5
The course has helped me to understand the structure of language	31	55	11	0	2
I have improved my listening and reading skills in English more than I expected	22	47	21	4	6
The course has helped me to analyse the way language is constructed	23	56	16	4	1

Table 7.1 Student teachers' perceptions of course outcomes

In table 7.1, it is evident from the data that 88% of the students enjoyed the way Functional English course was taught to them. 86% and 79% students respectively found the course helpful in making them understand and analyse the language structure. For 85% students the course was interesting. The responses show very high percentages of students holding positive views in relation to the Functional English course. The data for all the questions showing the views before and after the course (Phases I and II) are shown in the appendix.

Five items from the teacher questionnaire showed almost unanimously positive views (table 7.2):

N = 7	In agreement
The course design encourages quality teaching	7
This course is strongly student-centered	6
The course involves much activity-based learning	7
The course is interesting to teach	7
I use group work materials regularly with my students	7

Table 7.2 Teacher perceptions of course features

The above responses show that the expectations of the teachers were also met. Teachers found the course strongly student-centred with much activity based learning and they held positive views about this. This general picture of the perceptions of students and teachers is now discussed further in the light of the student teacher focus groups, teacher interviews and observations.

Simply by looking at the course guidelines, Phase-I data showed that students were expecting this course to be different and interesting as compared to their previous English courses. In Phase-II, the views of two students reveal how they saw things at this stage:

‘It was very interesting. We learnt in a way that was enjoyable. Unknowingly we learnt a lot.’

(Participant 5, FG 2)

Participant 4, FG3: ‘Our syllabus/course was very interesting. .

Interviewer: ‘What was so interesting in your course?’

Participant 4, FG3: ‘Everything was interesting. The activities were designed in such a way that it helped to learn on our own.’

The students mentioned activities in particular in helping them learn better. All the participants of focus group 3 were very positive about the activity based nature of the course which made this course enjoyable for them. The first student teacher commented perceptively on learning ‘*unknowingly*’. However, there is no way of knowing whether this includes critical thinking skills.

The students were also very positive about the course guidelines. They stated:

‘Only course guidelines were available which were very comprehensive, and we have to look for relevant material for our presentations and assignments online.’

(Participant 2, FG 3)

‘Course guidelines were very clear and the handouts provided to us in the class were very helpful.’

(Participant 2, FG 4)

‘It was based on relating class room learning with real life experiences.’

(Participant 4, FG 3)

The students noted the clarity of guidelines with approval and they were positive in relation to the real life nature of the activities. Of course, the students were not familiar with such guidelines during previous learning experiences.

Teachers were overwhelmingly positive about the course guidelines. Riffat had mentioned being overburdened with preparation when interviewed in Phase-I. When asked to reflect on her experience in Phase-II, she said:

‘When I responded earlier I had just started that course but then I found that all the activities were highly structured and handouts and related online material with links were mentioned in the course guides and it was a relief and lessen my burden, that's how I managed to take my classes.’

(Riffat, F, BSc)

The availability of handouts and the details of all the relevant website links made it far easier for teachers to plan their lessons and activities efficiently. The next section presents the findings on how the expectations of participants were met regarding enhanced language skills

7.2.2 The Experience of Enhanced Language Skills

As mentioned in chapter 2, one of the major objectives of teaching English courses in Pakistan is to make students able to understand and communicate in English. Findings from Phase-I showed that students and teachers had high expectations of enhanced language skills from the Functional English course, Phase-II explores how the Functional English course met those expectations and whether it could help students develop their language skills and understand the language structure. The following responses of students in this regard are being presented:

‘Previously memorisation was involved but in this course we focussed more on language structure.’

(Participant 5, FG 5)

‘I felt as if we used to focus more on grammar rules but this course taught us how to express ourselves at different occasions. We practiced English [language skills] more.’

(Participant 4, FG 5)

These comments relate to good features of the course in terms of the development of language skills and do not offer much insight about critical thinking development. However, it can be noted that students confirmed that this course focussed more on development of their language skills.

Similarly, students also mentioned:

‘We expected that our language skills will be enhanced and we are happy that today we are confident in speaking English.’

(Participant 1, FG 3)

‘I can write well now in English and improved other language skills also.’

(Participant 3, FG 3)

These statements confirm that the students held very positive views about the course and found it immensely valuable in terms of their skills of communication: they achieved their expected goal of enhanced language skills.

Teachers shared the similar views in the following words:

‘I was expecting my students to do well in language skills and today my students can speak in English confidently and they can write creatively. I wanted them all to start speaking, reading and writing and understand what they listen to ... and I see remarkable improvement in them.’

(Saboor, M, MPhil)

‘I am satisfied that though I was not an English teacher but I have achieved my goal which I had set for myself that is to teach this course to my best and to make my students able to speak and think. I have seen remarkable improvement in my students and I see them

successful in their career, I mean they will be very good teachers and independent learners with good thinking and communication skills.’

(Riffat, F, BSc)

While there is an understandable emphasis on language skills, the second quotation specifically refers to thinking. This teacher shared a sense of achievement when speaks of the students becoming ‘*independent learners*’ and sees good thinking in that context. It is also interesting to note that Riffat was aware of the fact that, while she was not a trained language teacher, she managed to achieve the target she set for herself in terms of this course.

One teacher linked the development of language skills to the development of critical thinking skills:

‘As I mentioned earlier that students will develop their critical thinking skills also along with their language skills and its evident from their performance in class that their thinking is also improved. In the beginning they were shy and less responsive but now whenever I pose any question they think and every student tries to respond which is of course because of improved thinking skills.’

(Meero, F, MSc)

The concept of developing skills that are more generic along with development of language skills is an important feature of the course guidelines. This teacher also linked the evidence of critical thinking skills with the way students responded in the class. She also acknowledged the importance of questioning and referred to it as something that made students think and respond accordingly.

7.2.3 A Course free from Textbook Prescription

The findings from Phase-I revealed that students were expecting this course to be ‘*interesting*’, ‘*enjoyable*’ and ‘*activity based*’ but another aspect that they were also positive about this course was the absence of a ‘*set text book*’. The following comments of the students in Phase-II highlight further insights of the students on a course free from a prescribed textbook. The responses of students included:

‘Previously we used to follow textbooks and our whole learning revolved around bookish knowledge but first time we had a feeling and were given opportunity to practice all four language skills. It was taught as a language not subject.’

(Participant 6, FG 5)

‘There was no prescribed text book instead a lot of [re] sources were suggested in guidelines.’

(Participant 5, FG 2)

Perhaps the most marked feature of their comments was the observation that English was taught as '*a language not subject*'. The lack of the textbook gave freedom to engage in many activities and reduce the emphasis on memorisation.

One of the students specifically mentioned thinking when said:

'We are given opportunities to think and learn, and we are not bound to text books.'
(Participant 4, FG 4)

This student teacher found that the absence of a set textbook gave them opportunity to think. In the light of above comments, it can be argued that the absence of a textbook did release the pressure on the teachers and provided them the opportunity to focus more on the learning of the students through different activities although the teachers did not comment specifically on the absence of a text book. The next sections will present findings on how students and teachers found activities which were more student-centred.

7.2.4 Student-centred Class

In Phase-I, the Functional English course had been described by one of the teachers as a 'paradigm shift from teacher centred to student-centred'. In phase-I, the students did not employ the same language but did stress that they were expecting the Functional English course to give them opportunities to be involved in the learning process through various activities. In Phase-II, the students had plenty to say related to their involvement in learning. For example:

'It [previous learning experience] was teacher centred but here we were active learners and we experienced student-centred class.'
(Participant 1, FG 5)

'It makes us search for relevant material on our own and that's how we learn better.'
(Participant 3, FG 5)

'... whatever we have learnt we will apply our learning experience. Our own learning experience will help us in making our students understand whatever is being taught to them.'
(Participant 7, FG 3)

It is interesting to note that students did notice the difference in teaching approach in their previous and recent experience of Functional English course. One of the students specifically mentioned teacher-centred approach hindering him from becoming an active learner. It can be deduced that this student teacher enjoyed the Functional English class giving him opportunity to experience independent learning where he can exercise different skills by participating in the activities. Overall, the above comments highlight the

enthusiasm of the students towards a more student-centred learning approach. Students were positive about the kind of activities being employed in this course. When asked to indicate what one thing they had gained from this course, many referred to the confidence they felt they had gained and some also referred to thinking. It can be assumed that the liberty of sharing their view points and active participation in activities enhanced the confidence level of students, making them feel they could trust in their own abilities which might have remained untapped during their previous learning experiences. In phase-I, they expressed fear of being mocked at by teachers and peers during the learning process; however, they feel confident now and this can be considered as a major change for them

Teachers were also very positive when they referred to the student-centred class:

‘For this particular course I would say that ... students experienced active learning through different activities. This course was student-centred so students learned and enjoyed their learning as well. Students did everything on their own and thats how they learnt.’

(Meero, F, MSc)

‘Functional English course proved to be one of the most interesting courses in terms of students’ learning. It was paradigm shift from teacher-centred to student-centred, as I mentioned before, and I have witnessed a lot of improvement in the language skills of students.’

(Junaid, M, MA)

Given the traditional courses with a strong emphasis on textbook coverage and content memorisation, the description of the Functional English course in terms of involving a ‘*paradigm shift*’ is no exaggeration. Clearly in the views of teachers both enjoyment and quality learning have been enhanced.

7.2.5 Scope for Fostering Critical Thinking

In the Phase-II questionnaire, question 7 invited the students to write down (two sentences) any other benefits they had gained from the course just undertaken while question 8 asked them to imagine they were in a position to change the course, introducing one new feature. The Phase-I questionnaire applied before the Functional English course referred back to their Intermediate English course, while the focus of Phase-II questionnaire, applied towards the end of the Functional English course, was on the Functional English course itself.

The questions were designed to allow the students to indicate important features of such courses but, even more importantly, to indicate what features they wanted or wanted to

develop further. This offers another tangential insight into the place of thinking or, specifically, critical thinking. The interesting issue is whether completing the Functional English course changed the priorities they had identified.

The student teacher responses were analysed by identifying the key words and phrases they used and comparing the frequencies of the ideas they mentioned. The most marked observation from the student teacher responses was the fact that the sheer number of responses *after* the Functional English course was several times higher than *before*: over 850 phrases used *after* compared to about 260 *before* when listing benefits; nearly 500 phrases for what they wanted compared to less than 140 before (Table 7.3). It can be noticed that the Functional English course had generated far more perceived benefits than the previous intermediate course while the desires for the new features were much more marked after Functional English course. Inevitably, part of this can be explained simply by increased experience. However, the way they wrote afterwards showed a very marked increase in positive perceptions and suggestions. In simple terms, they appreciated what they had just experienced in the Functional English course and wanted more of the same approach and emphasis. The frequency of use of some of the key words and phrases is illustrated in table 7.3.

Phrases Used	Before		After	
	<i>Appreciated features</i>	<i>Desired features</i>	<i>Appreciated features</i>	<i>Desired features</i>
Basic skills (reading, writing, listening, speaking)	99	11	75	3
Grammar and vocabulary	15	5	1	2
Language skills (unspecified)	10	0	29	0
Thinking skills	1	0	56	4
Activities, involvement, participation	0	5	5	44
Understanding	7	0	11	2
Words like: improved, enhanced, good, developed	10	0	97	0
Confidence	4	0	12	0
Group work, discussion	1	9	5	92

Table 7.3 Frequency of the Words used by Students in Questions 7 and 8

Following their experiences with the Functional English course, the students' views relating to basic skills were not much altered. However, they strongly appreciated the place of thinking skills (a few specifically mentioned critical thinking) and they wanted more group work and discussion opportunities. They wanted increased participation in their own learning. Confidence and understanding had also grown. One of the most

marked differences was the frequency with which the students used words like *improved*, *enhanced*, *good*, *developed* in describing features of the Functional English course.

In interpreting this table, it is important to recognise that students were given a limited space to express their views and, therefore, an increase in emphasis in one area will tend to mean a decrease in other areas.

7.2.6 The Role of Activities

In the section above, student-centred learning has been valued by both students and teachers. However, this kind of learning offers the opportunities where students could challenge themselves and each other. The following students spoke about the effective role of activities:

‘Here in this course we came across a new method of teaching which was activity based and it really helped us in improving our language skills.’

(Participant 2, FG 3)

‘This course promotes thinking as it involves many activities.’

(Participant 1, FG 4)

Group discussions were also very helpful in promoting our thinking skills.

(Participant 4, FG 1)

Overall, the students enjoyed this kind of activity based learning which they found innovative and very different from their past experiences which were built around rote memorisation. They mentioned activities as a prompter to ‘thinking’. In the first comment the student teacher found activities helpful in ‘learning’ and ‘language skills’. It can be gathered that activities provided them opportunities to interact and communicate among themselves (a rare phenomenon in previous learning) so this enabled them to practice the language skills. The way the activities were structured also required the students to debate, argue, and evaluate, all aspects of critical thinking, thus promoting thinking skills.

Similarly, another student teacher commenting on different activities stated:

‘Presentations, role play, stage performances....we enjoyed all these things and these were quite new to us.’

(Participant 5, FG 3)

All this is very positive and two students considered that it promoted thinking. However, one noted a potential problem:

‘In a crowded class it is not possible to arrange activities and make students able to think because it is difficult for teacher to manage activities in crowded class and make students think critically’.

(Participant 5, FG 3)

This stresses the importance of organising the learning activities where there are smaller groups and the kind of group work tasks, which are integral to the Functional English, course do offer opportunities for students to develop the critical thinking skills.

Teachers were similarly positive, a typical comment being:

‘I have been teaching English for last ten years but the new BEd (Hons) course is wonderful and exciting in the sense that the teacher gets chance to introduce new methodology in class. Previously, I used to teach traditionally but the new course guide and content mentioned is quite interesting. Students get involved in various activities and learn various skills by collaboration, like learning how to apologise, making requests, suggestions etc. They learn things practically by role playing, simulation and by using internet when it is available. The websites are also mentioned in course guide, which does not only save time but enable the teachers to download beforehand and practice it in the class.’

(Shabana, F, MPhil)

Shabana was an experienced teacher and yet the Functional English course had made a strong impact on her. The fact that she saw the course offering a new methodology encouraging high levels of student involvement illustrates the stifling nature of the traditional ways of teaching and learning in Pakistan. Clearly she had found the course exciting and was particularly enthusiastic about the suggested activities, seeing these as a wonderful resource for her teaching. Overall, in the Functional English course, the activities in the course gave scope for the student teachers not only to develop their English language skills but also for questioning and challenging that is implicit in critical thinking.

7.3 Perceptions of Critical Thinking

In Phase-II, students and teachers were well placed to comment on their recent learning experience in their Functional English course in general and, specifically, about their perceptions of critical thinking skills. As mentioned earlier, in this study critical thinking has been conceptualised as purposeful thinking that generates skills such as analysis, evaluation, weighing evidence, considering options, making judgements, all of which require appropriate questioning. Bearing this definition in mind the findings of Phase-I revealed that students were considerably confused when they were first asked to share how they conceptualised critical thinking. However, the teachers (in Phase-I) described

critical thinking as an ability ‘*to judge*’, ‘*to weigh*’, ‘*consider*’, ‘*analyse and evaluate*’ and then reach to ‘*long lasting conclusions*’, ‘*to assess a topic and accordingly add, delete, omit etc.*’. Phase-II aims to present any change and alteration in the perceptions of teachers and students following completion of Functional English course.

7.3.1 Student Teachers’ Perceptions of Critical Thinking

In Phase-II, the same questionnaire as used in Phase-I was now used near the end of the Functional English course and explored aspects of the nature of critical thinking tangentially. In Phase-I, students reflected back on their previous English courses with reference to critical thinking skills but, in Phase-II, it was all about how the Functional English course had helped them with better understanding of critical thinking.

The following Phase-II questionnaire items helped ascertain the context in which the Functional English course offered scope for fostering critical thinking (Table 7.4).

N = 140	Positive		%		Negative
The course gave me scope for thinking	35	21	6	14	24
I was encouraged to think and question	62	26	8	1	1
The lecture course challenged me to think and to question	50	34	9	2	4

Table 7.4 Phase-II Student Teachers’ Views on Opportunities to Think and Question

When these questions were asked at the beginning of the course (Phase-I), the proportion of the students indicating positive views (the first two data boxes in table 7.4) was very much less, suggesting markedly more positive views towards the completion of the course. In Phase-I, only 22% students hold the view that their previous English course gave them scope for thinking with 51% students who thought they were encouraged to think and question, whereas 68% students considered their lecture course challenging and made them question and think. In Phase-II, the percentages for the same questions went up to 56, 88 and 84 respectively. This suggests that the students viewed Functional English course offering them the opportunity ‘*to think and question*’. This is supported by comments of the students in the focus groups and these are now discussed.

Increased clarity about the nature of critical thinking

At the beginning of the course (Phase-I), the students showed confusion in their ideas about the nature of critical thinking. However, the following quotations illustrate how their views altered and became more precise towards the end of the course (Phase-II).

In focus group 1, for example the dialogue among the students that follows is typical:

‘Before exposure to FE (Functional English) course we hardly had an idea that how [critical] thinking can be involved in learning.’

(Participant 1, FG 1)

‘... as my friend has mentioned, I would further add that we have been practicing [critical] thinking skills unnoticeably or without realising that there was any thinking involved in learning.’

(Participant 3, FG 1)

‘... though [critical] thinking has always been there but it was more like of casual thinking.’

(Participant 5, FG 1)

‘... when you first asked this question, we were really confused what it might be ... that’s why we all replied we don’t have any idea about this, ... after that when we started realising that that’s [critical thinking] what we always practice in class room during different activities and so on.’

(Participant 1, FG 1)

The first two comments seem to suggest that the students did not see any role for thinking in their previous learning, this apparently reflecting their normal experience of learning which was memorisation of transmitted information. Throughout the conversation, the students looked pleasantly surprised at their recent experience in the Functional English course where they saw the value of thinking. The reference by participant 5 to ‘*casual thinking*’ could be interpreted as lack of awareness of the tight focus required for critical thought. The final comment suggests that the confusion arose from their previous experiences and that the activities during the Functional English course were now being seen as offering opportunities for critical thought. Overall, all of the above comments indicate that the students were aware of their confusion over the nature of critical thinking at the start of the course and that their views had become more precise during the Functional English course.

The following comments illustrate how students were beginning to view the concept of critical thinking. When they were asked if they could describe critical thinking, one of the students shared an important clarification:

‘Earlier I used to think that critical thinking means negative thinking or finding faults with something but today I think critical thinking means to think of all the negative and positive aspects of a thing and then come to some conclusion. We can call it careful thinking.’

(Participant 1, FG 4)

This comment revealed that an earlier confusion related to the word ‘*critical*’ had been clarified. This student teacher was now indicating that critical thinking involved to look for ‘*the negative and positive aspects of a thing*’ and saw this as completely different from negative criticism. The ‘*casual thinking*’ referred to by participant 5 (FG1) above stands in contrast to ‘*careful thinking*’ mentioned by participant 1 (FG4). Although it is not possible to be certain, perhaps this student teacher was beginning to become aware that there is some kind of precision as a feature of critical thinking: critical thinking was a specific aspect of thinking in which specific types of questions were being asked.

Another student teacher comprehended critical thinking slightly more precisely in saying:

‘... To me critical thinking is to think logically and then come up with the best ideas we have thought of.’

(Participant 5, FG 1)

While logical thought is suggested to have a role in critical thinking, critical thinking also involves more than generating ‘*the best ideas*’. Nonetheless, this student teacher seems to acquire a clearer appreciation of the nature of critical thinking. The overall impression gathered from the above statements is that students seemed aware of the concept of critical thinking although they could not describe it in any precise way. However, they tried to interpret the term critical thinking to the best of their understanding. It was interesting to note that a general perception about critical thinking (negative criticism) had been clarified. The students were now aware that critical thinking required ‘logical’ thinking, to approach a problem or situation from different angles. It can be assumed that the Functional English course had provided opportunities to students to try out different approaches to come to conclusions and, in the Functional English classroom, these conclusions can be related in some way to their performance and the kind of activities they were involved in, in the process of language learning.

Student teacher views on the role of questioning

According to the working definition of critical thinking established in this study in the light of the literature, the role of an open questioning mind is very important (see figure 3.7) and one student teacher stated that:

‘If we encounter any sentence or statement, which is not in accordance with what we have been taught, then we think and question, and ask our teacher if it is right or wrong’.

(Participant 2, FG 3)

The importance of questioning was mentioned in Phase-I when a student teacher referred questioning as a means to resolve confusion and tried to establish a link between thinking and questioning. It was interesting to note that, in Phase-II, many students referred to questioning in helping them understand the concept of critical thinking. The insights of three students on questioning are being presented here:

‘Participant 3, FG3: To me CT [critical thinking] is thinking differently from traditional way

Interviewer: What do you mean by differently?

Participant 3, FG3: I mean thinking deeply about different aspects and asking questions from ourselves.’

‘Participant 1, FG3: Higher order learning involves critical thinking

Interviewer: what do you mean by higher order thinking?

Participant 1, FG3: It involves questioning, ample time be given for thinking, and students should not be forced to learn something instead they should be given an appropriate time to think and learn by themselves.’

‘Participant 1, FG4: ... deeply thinking

Interviewer: What do you mean by deep thinking

Participant 1, FG4: ... to think about questions that what, when and how it is so ... so that’s what I called deep thinking.’

At the outset, these three students described critical thinking in broad terms: *‘thinking differently from traditional way’*, *‘higher order learning’* and *‘deeply thinking’*. When asked to explain what they meant, they highlighted the role of questioning in critical thought. One student teacher was aware that such thought took time while also noting that this related to students learning by themselves. Participant 3 (FG3) spoke about *‘asking questions from ourselves’* suggesting the personal or internal nature of such questioning. Participant 1 (FG4) also showed some awareness of the directed nature of the questioning that was involved when referring to *‘what, when and how’*.

Overall, the data from Phase-II indicates that, towards the end of the Functional English course, there is evidence to suggest that their understanding of the nature of critical thinking had changed considerably when compared to the position at the start of the course. Although, there is diversity in the views of students regarding conceptions of critical thinking, they all stated that the Functional English course made them think. They

all had different interpretations of critical thinking but there seemed to be a recognition of the role played by ‘*asking questions*’ in assisting their thinking.

7.3.2 Teachers’ Perceptions of Critical Thinking

The findings from the teacher questionnaire in Phase-I suggested that teachers were very positive about the Functional English course in terms of providing them opportunities to encourage critical thinking. They showed high expectations in this regard. In Phase-II, the teacher questionnaire explored whether the Functional English course had met their expectations in relation to the development of critical thinking skills. Selected questionnaire statements with respect to teacher perceptions of critical thinking are shown in table 7.5.

N = 7	In agreement
The course developed critical thinking skills	7
This course focussed more on thinking skills	6
I should have liked more opportunity to encourage my students to think	7
I encouraged my students to question and challenge	7
It helped students to think critically	6

Table 7.5 Teacher Perceptions on the Outcomes of the Course (Phase-II)

The above table shows that all the seven teachers felt very strongly that the course had fulfilled their expectations in relation to the development of critical thinking skills. They all stated that this course provided them with opportunities to encourage and challenge their students to question and made them think critically. It would be interesting to explore further in interviews and during observations that how they considered that this course offered them such opportunities. Although the questionnaire data confirms that teachers found this course met their expectations in general. The interview data presented in the following section provides more detailed information on teacher perceptions about critical thinking.

Increased clarity about the nature of critical thinking

The findings from Phase-I showed that teachers, both implicitly and explicitly, recognised the importance of critical thinking. Although they had some idea about the term ‘critical thinking’, the evidence showed that these views were very diverse. In Phase-I, teachers used phrases for describing the concept of critical thinking like, ‘to judge’, ‘to weigh’, ‘consider’, ‘analyse and evaluate’, and then arrived at ‘long lasting conclusions’, ‘to

assess a topic and accordingly add, delete, omit etc.’ While these phrases suggested that teachers did have some idea of the concept of critical thinking, none of them came up with a precise definition of critical thinking.

In sharing thoughts on the concept of critical thinking, one teacher was quite expansive in saying:

‘It is a deliberate process of thinking in a classroom situation which enables learner to make reasonable decisions. Many a times we practice it un deliberately in our daily life. I would like to share an interesting fact with you that last time when you asked this question I was not sure if I could understand this term CT but after that when I was teaching I have noticed it myself that we have been practicing CT skills throughout our learning but could never have understanding of this CT skills and same was the situation with my students. ... it was not that CT was not taking place in class, it was and it has always been there but we never realised that to practice thinking is also a skill.’

(Riffat, F, BSc)

The evidence from this comment indicates that this teacher considered that her understanding of critical thinking was much clearer as a result of teaching the course. Riffat recognised that opportunities to encourage critical thinking had often been absent although the capacity to think that way was always there. Interestingly, she had learnt that practicing thinking is a skill itself. She was aware that critical thinking is a ‘*deliberate process*’ and the goal for that process is to make decisions-based on judgments.

Another teacher talked about the idea of making reasonable decisions, which is implicit in the comment below:

‘I want to make my students investigate the reasons and consequences of a particular situation or topic under discussion etc. It’s thinking rationally, I mean with justification.’

(Qadsia, F, MSc)

Here, Qadsia refers to ‘*reasons and consequences*’ and has a clear aim that her students should investigate these. She uses the word ‘*justification*’ and this implies some kind of analysis in an attempt to evaluate a particular situation or topic.

Overall, the views of the teachers of the nature of critical thinking had become more precise since the start of the Functional English course. However, towards the end of the course, they were seeing critical thinking very much in terms of skills: analysis, evaluation, weighing evidence, considering options, making judgements. This is much as might be expected. This is the practical way critical thinking can be observed. The other

aspects/features of critical thinking as described by teachers are presented in the following sections.

Capacity to evaluate received information

One of the skills that is important in critical thinking and mentioned in the working definition of critical thinking adopted for this study is the ability and willingness to analyse, and hence evaluate, information reaching the learner. Several teachers were aware of this and three comments typify their insights:

‘All the time students were asked to analyse the situation/text, compare various possibilities, evaluate different alternatives that is how the students were practicing different form of critical thinking.’

(Qadsia, F, MSc)

‘My understanding of CT [critical thinking] is to have conceptual learning I mean to analyse, evaluate, compare the information and then come to some conclusion.’

(Meero, F, MSc)

‘The thinking processes were developed in the way that they became self-directed learners from this course. They started thinking to analyse their own work and evaluate themselves because they became in charge of their own learning.’

(Shabana, F, MPhil)

While these three teachers refer to the processes of analysis and evaluation, Meero also emphasised that the aim was to reach a conclusion, while Qadsia talked of ‘*different alternatives*’, which might also imply the need to reach a conclusion. Shabana has also suggested relating critical thinking to becoming ‘*directed*’ learners who are ‘*in charge of their own learning*’. In all of this, there is a need to evaluate one’s own work as well as information that has been received.

Teacher views on the role of asking questions

The role of questioning and its importance was recognised by teachers in Phase-I implicitly. In order to weigh evidence and distinguish between possibilities and solutions, questions need to be directed at the material being presented, its source, and its likely meaning, requiring the ability and willingness to ask purposeful questions. Findings from Phase-II are presented here to see how teachers recognised the central role of questioning in developing critical thinking among students.

The role of questioning was highlighted explicitly by two teachers:

‘asking questions, developing dialogues, analysing, evaluating, are all part of critical thinking skill’.

(Shabana, F, MPhil)

‘We should not be making them blind followers of whatever they are being taught. Basically they should be able to question. We should not restrict them to any specific or one way of thinking.’
(Saboor, M, MPhil)

For these two teachers, questioning is an essential element in critical thinking. The teacher may need to take the initial lead in posing questions. Equally, teachers need to provide opportunities for students to question in this way and give them encouragement to do so in a supportive atmosphere of learning. Although these teachers did not specify the nature of the questioning, it is clear from their remarks that they were thinking of specific questions and a specific type of questioning.

When these views are considered at the outset of the course, there is evidence to suggest that the understandings of the teachers have developed. Although all the teachers had considerable teaching experience, the completion of the Functional English course seems to have enriched their knowledge of the nature and the purpose of critical thinking considerably. The central focus on questioning is more apparent: the students needed opportunities to challenge and think through what was being taught as well as being encouraged to look for better ways in completing the assigned tasks. They seemed to be seeing critical thinking in terms of positive outcomes. Thus, in seeking to solve problems, students were developing the skills of questioning, the goal being to achieve better outcomes.

The teachers were universally convinced that the course was developing critical thinking skills, focussing more on these skills than previously. They were also of the view that they wanted opportunities to encourage the students to think, involving questioning and challenge. Overall, they saw the course helping students to think critically.

7.3.3 Experience of Teaching, Applying and Evaluating Critical Thinking Skills

This section presents the findings on how students liked the way critical thinking was nurtured through the Functional English course. It also presents how teachers found the process of fostering of critical thinking skills through a Functional English course. This was not the focus of the questionnaire data but the focus groups and interviews offered opportunities to explore this area.

Student teacher views on the development of critical thinking skills

In Phase-I, students (being prospective teachers) were asked how they thought critical thinking skills could best be taught and how would they like to teach critical thinking skills to their students. In response to these questions, they indicated that activities might help them practice critical thinking skills. Perhaps being aware that group work activities offer opportunities for discussion and questioning in an unthreatening atmosphere. In Phase-II when the students were approached with the same questions, it was interesting to note that students were very excited to share their experience of learning and using critical thinking skills during the Functional English course. Their perceived ways of teaching critical thinking with reference to the Functional English course that would be relevant to their own practice as prospective teachers are presented in the following sections.

Developing critical thinking skills through student-centred lessons

One teacher commented in Phase-I that the way the Functional English course was constructed involved a paradigm shift, the course presentation being more student-centred. It was interesting to note that, in Phase-II, a student teacher also noted the similar point relevant to teaching when he said:

‘When the classroom is student-centred then there are more opportunities to teach CT [critical thinking].’

(Participant 6, FG 1)

This student’s observation is very useful. Student-centred teaching is seen by this student teacher as useful in providing scope for the development of the critical thinking. While it cannot necessarily be deduced that student-centredness is the essential feature in enabling critical thinking to develop, allowing students to work in groups on tasks which give opportunities to dialogue, debate and question is likely to provide circumstances for some of the skills of critical thinking to come into play.

Developing critical thinking skills through class activities

The opportunities to develop critical thinking skills, that can arise in group activities, was noted by several students and typical views are:

‘It is evident ... critical thinking can be taught through activities.’

(Participant 1, FG 1)

‘I will engage my students in activities and assign them such tasks where they have to do things on their own. I will make my students to search relevant information to find answers of their questions.’

(Participant 6, FG 2)

‘We can ask our students to search relevant material in advance about the topic to be discussed by giving them key points of the topic. Students then can search for the relevant material and this will make them think critically that what is the most relevant material etc.’

(Participant 6, FG 3)

‘I think brainstorming and other classroom activities help students learn CT skills.’

(Participant 3, FG 4)

The above views suggest that students as prospective teachers found activities very helpful in thinking about teaching critical thinking skills. The first quotation conveys the message that the actual experience had made an impact. They stressed that they want to use the same kind of approach in their own teaching. Brainstorming sessions were also mentioned as helpful for learning and teaching critical thinking skills. Searching for relevant information was another thing mentioned by students which could possibly help them in their future practice. Students understood that, when they need to find the most relevant information online, they go through much available information, and this requires them to think critically, applying questions and looking for reasons for making choices.

The overall impression that can be gathered from these responses is that students found the activities an effective means in developing critical thinking skills that they might apply to their teaching in the future. However, other features of the course were also perceived to be helpful in the development of critical thinking skills.

Developing critical thinking skills through questioning

Earlier in this chapter, the general role of questioning was noted as a key factor that was a central feature of critical thinking skills. The students mentioned the importance of the role of questioning when they started to look forward to their own careers as teacher. This can be observed in the following responses:

‘The questioning technique of teacher, which make us think, plays very important role in teaching critical thinking.’

(Participant 7, FG 1)

‘... teacher must have a well designed lesson plan with well defined questions written in plan only then teacher will be successful in making his/her students think critically.’

(Participant 3, FG 3)

‘We will ask more and more questions and will make them do different activities, search different materials online, prepare cards and with the help of flash cards we can make them think.’

(Participant 2, FG 3)

‘I myself have learnt here in the university that how good questions can generate good thinking process.’

The last participant seems to have seen the central nature of the questioning involved. He describes the questions using the adjective ‘*good*’ but exactly what he meant by the word cannot be deduced with certainty. What it does seem to imply is that it is not simply questioning that is important but the nature of the questioning is also important. The questions need to be purposeful in the sense that they are leading to an evaluation in order to determine what is most appropriate. Questions can be asked that merely explore the factual nature of what is being presented. Thus, a teacher might wish to check that students had taken in information correctly. By contrast, the questioning that is central to critical thinking is purposeful in the sense that it enables the individual to analyse, evaluate, weigh evidence, consider options, or make judgements. The questions are exploring issues like validity, accuracy, potential bias, as well as mental processes like analysis and evaluation.

This links in with the other quotations above which indicate that students are aware that teachers must be good at questioning techniques. It has been suggested that teachers should prepare a good lesson in advance with ‘*well defined questions*’. Perhaps these can be described as productive and purposeful questions. One of the students liked questioning as a strategy to use with his own students when the time came for him to teach.

Diverse thoughts on developing critical thinking skills

A few students shared diverse thoughts on how critical thinking can be developed:

‘When I’ll become a teacher then I’ll try to bring learning close to life... for example I’ll show images from real life to my class and ask them to think and describe, relate and make connections.’

(Participant 1, FG 5)

‘When we are asked to discuss something in groups and we share the findings of different groups then we question the different aspects of their findings so it gives us a good opportunity to think.’

(Participant 3, FG 5)

‘When teacher assigns some home task she can ask students to discuss the topic at home, think about it and be creative in their ideas in completing that task.’

(Participant 1, FG 3)

‘When a learner is given a chance to participate actively and then for self evaluation; this gives him an opportunity to look for his weaknesses and strengths.’

(Participant 5, FG 5)

It is evident from the above responses that students held diverse views about the nature of critical thinking and then they suggested ways to achieve the goals implied by their views. For example, the first participant seemed to see critical thinking in terms of the relationship between ideas while the third participant related critical thinking to creativity. The second participant identified the goal of questioning ‘different aspects of their findings’ implying some kind of evaluation, perhaps with a view to identifying the best way forward. The focus of the fourth participant was more on self evaluation seeking to identify personal weaknesses and strengths.

This illustrates an important point. Teachers and prospective teachers will seek to teach towards goals which they see important and they will define these goals for themselves. It is therefore important that prospective teachers are made aware of the meaning of goals as specified by the curriculum document so that they can teach consistently towards these agreed goals.

Teacher views on developing critical thinking skills

In Phase-I, teachers did mention the role of activities in developing critical thinking in students. However their comments were mostly in anticipation of the Functional English course as it was just the start of the course. They were expecting that activities like ‘brainstorming’, ‘concept mapping’, ‘peer and group work’ ‘role play’ etc would offer opportunities to help students think critically. In Phase-II, when teachers were asked how they found teaching in the Functional English course with specific reference to the fostering of critical thinking skills, they expressed somewhat similar views when compared with the students:

‘It was not difficult to manage teaching critical thinking skills as far as this course is concerned, because the activities like group discussions, role play, presentations, individual tasks etc were all designed in such a way that critical thinking was part and parcel of all these activities.’
(Riffat, F, BSc)

‘The students enjoyed the interactive class and they were happy that they are working independently or in groups and being appreciated for their efforts. They were active participants in the teaching learning process in contrast to their passive role in the past.’
(Qadsia, F, MSc)

‘I tried to engage my students in such type of thinking during various group tasks, class discussions and assignments.... I assigned them such tasks where they have to think individually and then in groups, where they share their ideas or their experiences and come up with creative ideas. This of course engage them in critical thinking.’
(Junaid, M, MA)

‘This course provided plenty of information during activities and students learned and acknowledged that they were really learning. I mean they were so involved in real life like activities that they forgot formal teaching learning process.’

(Shabana, F, MPhil)

It is evident from teacher responses that they considered the activities which were integral to the course as making a useful contribution in the context of critical thinking. They mentioned that students liked these activities. They also enjoyed learning situations close to their real life. These activities sometimes involve students working on their own as well as working in small groups. This seems to indicate that critical thinking skills can be developed where students are working on their own, with both Qadsia and Junaid noting the place of working individually. Either working on their own or in groups can offer scope for the encouragement of critical thinking. One teacher focussed very precisely when stating:

‘When you let the learner make decisions and choices, you are providing the opportunity for thinking critically.’

(Qadsia, F, MSc)

She saw the opportunities for critical thinking when learners are given the freedom to make decisions and choices, rather than following a set of instructions. This emphasises the importance of students being given the freedom to evaluate the way tasks can be undertaken.

The classroom observations reveal numerous occasions where critical thinking, described as a way of thinking that involves skills like analysis, evaluation, weighing evidence through questioning, appeared to be taking place. The observations provided an opportunity to explore the extent which the researcher’s observations match the perceptions of the students and their teachers. For example, in one lesson students were invited to listen to two audio clips supported by text shown through multimedia which gave them a scope to listen carefully and to try to understand the instructions and later on follow them and undertake the activity. This encouraged the students to think and remember the instructions. Later on, they were required to apply this to complete the tasks. In another activity, students were required to develop questions and answer questions involving teacher-student interaction as well as student-student interaction. The encouragement and support for questioning, where alternative answers were being sought, seems to point to the development of skills that might underpin critical thought. In the

third activity, students were asked to examine each other's ideas critically and then choose the best way forward for designing instructions. In four lessons, there were brainstorming sessions where students had to evaluate various options critically.

Overall, during the group activities students had to analyse good practice and evaluate different ideas shared by group members and choose the best ideas to present before the class. The vigour of the discussion was evident as students critically examined and chose the most appropriate ideas generated in order to create the best ways forward.

Applying and Evaluating Critical Thinking Skills

In order to build on the views presented in the previous section of this chapter on the nature of critical thinking and the way critical thinking skills were featured in the Functional English course, this section focuses on how students and teachers saw critical thinking being applied. The issue being addressed is the extent to which it is possible to observe students applying critical thinking skills. If such skills can be observed, the observation provides a measure of evaluation that course objectives are being fulfilled. In Phase-I, students could offer very little when asked how they might apply critical thinking skills. One of the students of a focus group described the general application of critical thinking skills in daily life. However, the participants of the same group were amused by the fact that they never realised they had been using critical thinking skills though they were always there. It can be argued that this was due to the lack of clarity about the concept and understanding of critical thinking. However, in Phase-II the students were quite forthcoming in discussing the application and evaluation of critical thinking skills. While looking at their comments, two aspects need to be considered. Firstly, in the earlier discussion, student teacher understanding of the nature of critical thinking understandably showed considerable lack of clarity. In their comments below, it is possible that they are equating critical thinking with thinking in a wider sense. Secondly, they sometimes seem to overlap the ideas of application and evaluation. Their comments must be interpreted with these factors in mind.

Explicit application of critical thinking skills

Few students expressed their thoughts on evaluation and application of critical thinking quite explicitly. Here are few comments of the students:

‘... when we are given assignments or activities or when we have to search material online... we think about the most relevant and appropriate stuff so here we apply critical thinking skills because it enable us to decide what to choose or the best to choose.’

(Participant 7, FG 5)

This student teacher is linking application of critical thinking in taking the best decision. This does involve weighing evidence critically, implying some kind of questioning. This feature was mentioned by three more students:

‘The way students respond to questions and during activities in class they practice critical thinking skills.’

(Participant 2, FG 4)

‘Through questioning... when teacher ask open ended questions which have margin for thinking and also give us ample time to respond.’

(Participant 6, FG 5)

‘Also when students raised questions to satisfy their inquisitiveness.’

(Participant 5, FG 5)

The key role of questioning in stimulating thinking has been identified. However, the third student teacher has seen this in terms of satisfying inquisitiveness. While curiosity and inquisitiveness may be highly desirable features in all learning, of themselves they do not constitute critical thinking although they may well overlap with critical thought. Thus, the absence of any willingness to be inquisitive may stifle critical thinking: inquisitiveness implies questioning.

Two students again returned to the topic of questioning when asked about application and evaluation of critical thinking skills:

‘Group discussions and when students ask questions. It means they are thinking on the topic.’

(Participant 4, FG 4)

‘We can evaluate by asking questions.’

(Participant 3, FG 3)

Participant 4 (FG4) sees the asking of questions as evidence of thinking. In the context of how the question was posed in the group, it is possible to be fairly confident that he was thinking of critical thinking. The second student teacher above seems to be using his own experience as a student to focus on his intentions when he starts teaching because he was indicating that he could gain evidence of critical thinking in his future students by asking them questions.

Two students came up with further suggestions:

‘ We can evaluate the performance of students or the level of critical thinking by observing their performance in activities.’

(Participant 1, FG 3)

‘...even the body language, facial expressions show that if the students are thinking or not.’

(Participant 1, FG 4)

These comments are somewhat vague in that they do not give information of the key aspects of performance and, in the second case, seem to fail to recognise that people vary enormously in the extent to which facial expressions relate to thought. Two other students also suggested ideas:

‘...when we relate and connect our real life experience with class room learning and also share our personal experiences with each other in the class we are actually practicing and applying CT skills.’

(Participant 2, FG 5)

‘ By giving them topics for creative writing.

(Participant 6, FG 3)

There is, of course, no guarantee that bringing real life experience into the classroom learning will either generate or evaluate critical thinking but the students clearly see such experiences as helpful in developing critical thought. The second comment illustrates how creativity can sometimes be confused with critical thinking. As mentioned in Chapter 3, critical thought may well enhance creativity but creative thinking and critical thinking are not the same.

Evaluating critical thinking skills through activities

In Phase-I, teachers mentioned that ‘facial expressions’ and ‘students’ performance’ during the classroom activities help them evaluate critical thinking skills of the students. However, this was at the very start of the course. The question arises whether the teachers could now in Phase-II (towards the end of the course) further add to their previous insights. Teachers were again asked at the end of the Functional English course (Phase-II) how they saw critical thinking being applied and evaluated in the course. The teachers offered a range of insights:

One teacher commented:

‘...in role plays, interviewing technique, they were supposed to develop thinking skills in asking questions and developing answers in English while competing with each other. They were motivated to learn and display that they knew more than others.’

(Shabana, F, MPhil)

Shabana raises several issues here. She focusses on ‘*asking questions and developing answers*’ but sees this in the context of the competition and motivation. While asking questions is a central feature of critical thinking skills, it is not clear how competition is important or otherwise. However, group activity built around real life situations often has a strong motivational effect (see Reid, 1999).

Four other teachers also drew attention to the importance of activities:

‘Well I involved my students in activities.... they used to question and questioning is the first step of thinking. When I assign them a task like role play activity and give them time to prepare it they think and share their ideas with each other it means they are looking for the best to present and that’s critical thinking to choose the best available options/ statements etc and then to present them. This practice involves analysis and evaluation, which of course is critical thinking skills.’

(Saboor, M, MPhil)

Here, the student activities are seen as providing opportunities for questioning, analysis and evaluation. Saboor noted that ‘*questioning is the first step of thinking*’. He also observed the goal of thinking in terms of the ‘*best to present*’, and this links in with the purpose of developing critical thinking skills as seeking to lead to better decisions. Kareem also noticed the development through questioning:

‘Actually I have noticed them in the application of critical thinking skills whenever I asked them questions, in class or some presentation, or some other kind of activity, so I have seen some of the changes on the part of the students towards a certain issue or problem, their approach is now different from what they apply previously, when I first interacted with them.

(Kareem, M, MPhil)

Kareem focusses more on the questions he asked in relation to the activities undertaken and was very positive that ‘*changes*’ had occurred. Perhaps what Kareem was driving at was that group activities offered scope for students to ask purposeful questions in relation to what they were required to undertake. He was observing the development of questioning skills and saw these as evidence of the development of critical thinking skills.

Meero looked on the activities from somewhat different perspective:

‘In one of the activities I gave few topics to my class and asked them to think and come up with their ideas on these topics. You cannot imagine what a wonderful response I received. Students came up with such wonderful ideas that I was really amazed. They created different situations and then came up with ideas. And especially the way they responded.... I mean their confidence. This was all possible because my students have good thinking ability and when they were asked they used it in classroom activities and that's how they applied critical thinking skills in class.’

(Meero, F, MSc)

She seemed to be seeing creative thinking arising from critical thinking skills. While creative thought may sometimes be encouraged by critical thought, these two aspects of thinking are different (see chapter 3).

‘Critical thinking was evident from their response and performance during activities. And that’s how they used to apply their critical thinking skills.’

(Riffat, F, BSc)

Riffat saw activities as providing opportunities to apply critical thinking skills but did not offer any details about this. Qadsia went considerably further when she said:

‘It is evident by their performances during class activities, discussions and questioning. I would like to quote one example that during one of the activities when I asked students to think of different scenarios where they have to give and take instructions and I was pleased by the responses and the innovative scenarios presented by students. It was a pair activity and I realised that a well-designed course could make learning easy and better.’

(Qadsia, F, MSc)

However, what she describes is closer to creative thinking, again illustrating how difficult it is to describe critical thinking in terms that distinguish it from other aspects of thinking.

Overall, teachers described different ways to evaluate and show the presence of critical thinking. Inevitably, they suggest ways to evaluate in the light of their own perceptions of the nature of critical thinking. In some cases, they appear to use the word ‘thinking’ as almost synonymous with ‘critical thinking’ but they may be understanding thinking as a necessary step towards critical thinking. In general, they look for various student activities as indicators of critical thinking and in this their focus tends to be quite narrow. For example, they see students questioning, often in dialogue with each other, seeking to come to better decisions or looking for alternatives and better options. The teachers were positive about the course and the way it offered opportunities. However, other than evidence from student or teacher questioning, they did not specify very clearly the kind of evidence that would indicate the application of critical thinking or its evaluation.

7.4 Facilitators and Barriers: Experienced by Student Teachers and Teachers

The views of the students and the teachers about what they saw as facilitators and barriers in the development of critical thinking skills were explored towards the end of the course (Phase-II). The same questions which were used in Phase-I were employed again. As before, facilitators and barriers are considered together as the absence of one can constitute the presence of the other. The aim in using the same questions was to look for any differences between the two phases. The findings from focus groups, interviews and

observations are being presented here as the questionnaire was not designed to explore these issues.

7.4.1 The Role of the Teacher

The findings from Phase-I provide evidence that both students and teachers were well aware of the important role of teachers in learning. Teachers leave a lasting impression on their students. In this study, the role of the teacher has emerged explicitly as a major facilitator in terms of developing critical thinking and overall learning. In Phase-I students visualised their teachers as an ‘expert’, ‘encourager’ and a ‘facilitator’. Teachers also shared similar views. The findings on role of teacher from Phase-II are presented here.

Teacher as encourager

As previously highlighted, students referred to the importance of teacher encouragement in the context of developing critical thinking skills. For example, three students made specific reference to this:

‘She was so encouraging that we were always very excited for this class.’

(Participant 5, FG 4)

‘lack of encouragement by teachers.’

(Participant 6, FG 4)

‘Our teacher encouraged us a lot.’

(Participant 6, FG 5)

Student teachers clearly perceived the need to be encouraged. To overcome the shyness and lack of confidence, it is important that students must be encouraged and reassured about their capabilities time and again. This helps students in boosting their confidence. Since students were experiencing a new style of learning that is activity based (which they liked), they were inevitably positive in their views of their teachers. They saw their teachers as sources of encouragement and this encouragement from their teachers made them excited for the Functional English class. They considered it a major barrier in learning if the teacher’s attitude is discouraging.

One of the teachers was also aware of the importance of encouragement:

‘I do not discourage them at all and always encourage them to respond no matter right or wrong but I let them respond.’

(Riffat, F, BSc)

This teacher was aware of the problem of students and, therefore, she mentioned that she always encouraged her students to respond as this helps students to share their thoughts. The question of being right or wrong can be handled in way that students do not feel

embarrassed before the class. Often it happens that students feel hesitant to respond in the class because of the fear of being mocked at by fellow students or the teacher for being wrong and this hinders their growth as a learner.

Observations also confirmed that teachers were very positive in encouraging students to ask questions, respond to questions as well as to think and challenge.

Teacher friendly attitude

Students were well aware of the the importance of the teacher in learning. For example, one of the students specifically stated:

‘Nobody can deny the effective role of a teacher and in our case we are very lucky to have such a wonderful teacher who is more like a friend to us. He played major role in developing our thinking skills.’

(Participant 3, FG 1)

Another student teacher said:

‘Teacher is a role model and plays a very important role in our learning. Whatever I have learnt is due to my teacher.’

(Participant 6, FG 2)

Both comments recognise the importance of the teacher. However, the first comment links the development of thinking skills to the good teacher. In Pakistan, good teaching is very often associated with the efficient communication of information in a disciplined context. The first student teacher clearly sees the good teacher as *‘more like a friend’*. Similar thoughts were shared by two other students when they were asked to highlight any barriers they could mention:

‘....when teacher is non friendly and we have pressure due to his/her presence.’

(Participant 2, FG 1)

‘Teacher’s unfriendly attitude.’

(Participant 6, FG 4)

In order to develop thinking skills, students need to have the opportunity to be free to challenge and explore ideas in an unthreatening atmosphere. The first comment illustrates the importance of a free and supportive learning context if thinking skills are to develop.

There was some consistency in the views of teachers. For example, when discussing the importance of being friendly, one teacher stated:

‘By ‘friendly’ I mean that teacher should make familiarities or in other words it is known as ‘rapport’ or ‘rapport building’. You must have a strong connection with your audience. The students can never learn from those who they don’t like. They can never learn from teachers they don’t like. That’s why relationship is important.’

Another teacher linked this more precisely to the development of critical thinking skills:

‘I have realised that teacher plays a very significant role in developing students’ CT skills. As far as I see my role, I have always encouraged students to come forward and speak, ...’

(Junaid, M, MA)

This comment recognises the importance of students making their contribution in an atmosphere which is supportive.

Observations of the classes confirm this broad picture. In all five observations, there was strong evidence of good student-teacher interactions. Teachers were welcoming and supportive overall while, in a variety of ways, they encouraged the students to think and respond to what was being taught. Indeed, in class activities, the teachers were positive and outgoing and there was a high level of participation. In the group activities, the teachers encouraged full participation and the atmosphere was clearly supportive.

The views of students and the teachers are consistent with the findings from the observations. In all classes, there was a friendly and supportive atmosphere which encouraged dialogue, debate and questioning. The students were very positive about this.

Teacher as guide

Apart from being friendly and encouraging, students expect their teacher to be a guide also. One student teacher mentioned a barrier related with the role of teacher:

Participant 2, (FG2): Lack of guidance.

Interviewer: What do you mean by guidance?

Participant 2, (FG2): I mean to say that sometimes teacher leaves us to do everything on our own without giving us the guidelines that how should we do that. It obviously hinders our thinking. If we have to do everything on our own then what is the purpose of coming to the university. Teachers must guide and facilitate us.

In all of this, a balance has to be struck where the teacher gives clear guidance and support while, not becoming too dominant or prescriptive, thus stifling the scope of students to think, to question and to challenge. In this, the student teacher seems to be aware when he uses the word ‘*facilitate*’. Observations in all the classes revealed many occasions where the teachers were offering guidance but also allowing the students scope for thought.

Giving ample time to think

In the context of the development of critical thinking, several students raised the issue of not being given sufficient time for thought. For example:

‘To me the biggest hindrance is when teacher does not give time to think and instead of making us think and respond teacher starts conveying the information to us.’

(Participant 5, FG 1)

‘Lack of ample time for responding by teacher. All the students do not think at same pace, some need more time to think and respond as compared to others.’

(Participant 2, FG 4)

‘She used to give us enough time for thinking before responding.’

(Participant 1, FG 4)

There are two aspects of the issue of time being available for thought. One relates to curricula which tend to be overcrowded. However, this issue was not raised by the students. The issue they identify related to the way teachers often tend to provide ‘*answers*’, without giving the students enough time to think and respond. The third student teacher indicates that the teacher here was allowing the necessary time. Part of the time problem might relate to the level of teacher preparation. For example:

‘Teacher always come to class well prepared with well designed activities and lesson plans.’

(Participant 5, FG 1)

The well-prepared teacher is more likely to be better at time management but allowing students enough time to think and respond is a matter of pedagogical skill along with human empathy. Perhaps understandably, teachers made no comments related to this issue.

In all five observations, it was very obvious that the students had ample opportunity to interact with each other by posing questions to each other; the group activities providing students with the opportunity to think and share their ideas. In addition, classes as a whole responded well to teacher’s questions, suggesting that the time allowed was adequate.

Observations of the five classes revealed that teachers were employing a wide range of resources including handouts, white boards and chalk boards as well as multimedia. The teachers were adept in using brainstorming techniques as well as multimedia clips to stimulate questions and discussion. In all classes, teachers provided excellent feedback on students responses, the feedback being positive and affirmative. The teachers often asked questions themselves of the entire student teacher group but, more frequently, posed

questions which were addressed by the student teachers working in pairs or in small groups.

Teachers also arranged for students groups to pose questions to each other while teachers also gave strong encouragement to the students to take time to think and then arrange their thoughts and respond. Overall, teachers did not lecture although they often employed mini-lectures to introduce the topic or to stimulate questions.

Teacher questioning technique

The literature review on critical thinking identified productive questioning as a key element (see chapter 3) supporting critical thinking. One student teacher noted the role of questioning:

‘Our teacher played a very important role in developing our critical thinking skills. She used to question us a lot and encourage us to share whatever we had in our minds regarding that topic etc no matter right or wrong.’

(Participant 1, FG 4)

Observations of the classes confirmed the central role of questioning in the course. Sometimes the teacher addressed questions to the whole class, sometimes questions were addressed to groups while questioning between students within groups was a marked feature of all the classes observed.

Students were given opportunities to discuss, weigh options or evidence, evaluate ideas or options critically, to analyse, and to look for alternative ways of saying and doing things. All these skills are highly relevant in the context of critical thinking. Indeed, the observer was left with the clear impression that critical thought was underpinning many of the ideas that students expressed.

7.4.2 Students Educational Background

In the light of students’ experience of the course, aspects of the students’ educational background were explored to see how they saw these as helps or hindrances in the development of critical thinking. However, several students interpreted the questions in the context of language learning:

‘In the beginning, I found it difficult because of my weak academic background but this Functional English course helped me a lot in improving my language skills and now I feel very confident.’

(Participant 6, FG 2)

‘Obviously it affected a lot because we had some knowledge which helped us in this class but there’s no doubt that FE class helped us learn English better.’

(Participant 5, FG 2)

‘It [educational background] helped though our previous experience was boring.’

(Participant 1, FG 2)

‘Yes it [educational background] helped us because we had some knowledge of the language structure.’

(Participant 8, FG 5)

Several issues are apparent here. They gained some knowledge of language structure from previous courses. However, one student teacher referred to boredom while another one spoke of confidence. This emphasises the need for school courses to move away from the rote memorisation of information and to develop wider skills, giving increased confidence for future learning.

Similarly, teachers tended to focus on student teacher background problems hindering language learning in general rather than focussing on critical thinking:

‘I have come across such students who are from rural areas and their previous academic background is very weak and so was their performance in the class, few students were very shy and their lack of confidence was also a great hindrance ... I paid extra attention and gave them extra coaching sessions to help them get rid of their shyness, I always make sure that all such students fully participate in all activities and gradually this helped them a lot and today they are doing well in studies and more confident.’

(Meero, F, MSc)

‘Lack of confidence and poor academic background is something which really hinders their learning ... I never discouraged them at all; have always made them heard no matter right or wrong but I let them respond.’

(Riffat, F, BSc)

‘Their socio-economic background and poor basic skills posed great hindrance in the beginning but later they developed confidence and started taking part in every activity.’

(Shabana, F, MPhil)

The teacher views highlight the lack of equity in school education provision where rural schools are at a disadvantage and city private schools enjoy great advantages (see chapter 2). In all three comments, the idea of confidence is highlighted. This is important in communicating in a second language. However, it is also important in being prepared to address critical questions related to their learning. In Pakistani culture, the poor academic and social background affects the overall academic performance of students. One of the important issues related to poor academic background is lack of confidence. Students

coming from such a background consider themselves inferior to other students who have had better opportunities in terms of academic and social status.

Personal Issues

Students were aware that personal issues affecting their home or family life would influence their learning. However, they did not expand on any details:

‘Students who have some family problems they also are incapable of using critical thinking because of their family problems.’

(Participant 5, FG 3)

‘Domestic problems also affect critical thinking.’

(Participant 4, FG 5)

These comments are somewhat similar to the comments from both teachers and students in Phase-I. Although only two students mentioned personal issues as a hinderance, this issue may affect the performance of many students. It is possible that they do not realise or are too shy to share it in class or publicly.

7.4.3 Assessment Criteria

In Phase-I, both students and teachers were acutely aware that the examination system supported and encouraged rote memorisation. They expressed the view that the assessment outlined in the Functional English course would be very different and would enrich the learning. Near the completion of the course (Phase-II), students and teachers were asked the extent to which their expectations had been fulfilled. When asked if the assessment criteria helped to serve the purpose of the course, Participant 1 (FG2) said, ‘*Yes because this exam is concept based*’. It is not clear exactly what participant 1 meant in making this comment. However, it does imply a change from the recall based nature of the previous examination.

Marks Distribution

Under the former system, all the credit of the course was gained from a written paper set at the end of the course and this rewarded recall skills that could be tested in a written format. The Functional English course awarded 25% of the credit for a mid-term assessment and 25% for ongoing assessment tasks like presentations and assignments, leaving the remaining 50% for the end-of-course written paper. When students were asked

to comment on this marks distribution; two students recorded their views in the following words:

‘Marks distribution gives an opportunity to assess all language skills.’

(Participant 1, FG 4)

Marks distribution in semester system and especially in this course is good. We have 25 marks for our assignments and presentations etc which is good.’

(Participant 1, FG 3)

Students expressed satisfaction with the proportion of marks gained during the course compared to the end of the course. Their comments suggest that they consider such distribution helpful in assessing all language skills. It is natural that when students know that all language skills will be tested and examined then they pay more attention to learn all these skills. The former system focussed only on written expression meaning that students were more inclined towards memorising and reproducing the text in order to get good grades.

Referring to credit being awarded for ongoing assessment tasks, one teacher noted:

‘Being a language teacher I am very happy ... I can assess their listening skill, speaking skill, class participation, their questioning, answering. For example I can allocate 10 marks for class participation or listening comprehension etc. This semester system is better in terms of learning language because it gives scope to use these marks for different activities ...’

(Saboor, M, MPhil)

This teacher highlighted the benefits of the semester system in terms of allowing teachers to assess different language skills of students. The annual examination system does not offer this flexibility of marking. The assessment is totally based on written text at the end of the course. Assessment of listening and speaking skills are completely ignored. Assessments during the course do offer possibilities to test a wider range of skills.

Discouraging memorisation

In Phase-I, both students and teachers shared their thoughts on their expectations from the examination criteria set for Functional English as a means to discourage memorisation. In Phase-II, when they were near the end of the course, they have gone through an on-going assessment throughout semester and they commented very positively on the assessment criteria. Three students were very clear in their views:

‘We all think that our previous examination system encourage rote learning and memorisation.

(Participant 1, FG 3)

‘It [Functional English course] discourages memorisation.’

(Participant 3, FG 4)

Student teacher views were similar to those they held at the start of the course where they had observed that assessment almost always rewarded recall, thus encouraging rote memorisation. The Functional English course covers the assessment of all language skills and this helps students to learn better and, of course, it also discourages memorisation.

The teachers were very aware of the problems caused by examinations that gave most of the rewards for recall, one teacher observing that:

‘Earlier when I mentioned examination system as hinderance, I was keeping in view the traditional examination system which was content based and promoted rote learning but as far as FE [Functional English] exam is concerned I take it the other way round, it discouraged rote learning and instead developed creativity and long lasting learning in students because they have been taught to do things on their own.’

(Riffat, F, BSc)

Riffat was enthusiastic about the new examination structure but the emphasis is on the reduction in rote learning and recall as well as creativity and developing life-long learning skills. There is no mention of critical thinking.

Another teacher felt that the examination system still rewarded rote learning too much:

‘Actually in our Pakistani examination system, most of the students performance is based upon their rote learning, and it is still there, I think as far as the examination in the Functional English is concerned, I suggest and I believe that it should be different, and must be different from other subjects, because we have to judge the students, evaluate the students, in their practical usage of the language, how they use it ...beside that, the examination is just that of the memory, not the functional aspect...’

(Kareem, M, MPhil)

Teacher comments confirm what students mentioned above. In fostering critical thinking in students, teachers considered that the previous examination system is a major hindrance. They are aware that the Functional English course offer opportunity to assess all the language skills and also discourage memorisation. The sentiments express by Kareem echo comments from many students and teachers.

Training of teachers

It has to be recognised that the teachers had been brought up in a system where memorisation and recall dominated and they had been successful in that system. They had not experienced any role models of other emphases. In this context, it is unsurprising that they sought training. The importance of training of teachers was mentioned in some detail:

‘... assessment is very important but I have noticed that we ask such questions in exams which are based on memory or memory based things. I think teachers should be taught or they should keep this thing in mind that when they are designing a question paper they should pose such questions which give chance to every student to answer in their own context, based on their own analysis and evaluation. So first thing I would like to train teachers in posing right questions. Then I’ll suggest that listening and speaking must be a part of examination I mean oral exam must be included. Because instant question answer involves CT and its not based on memorisation. I am suggesting this especially for Functional English examination.

(Saboor, M, MPhil)

This teacher has focussed on the need for teachers to be trained and given experience in the development of assessment questions which move beyond recall. He specifically mentions listening and speaking skills. However, such assessments can be time consuming when large numbers are involved although good approaches have been developed but this is beyond the scope of this thesis. It is important to recognise that the students undertaking the Functional English course have been through an education system where the examination rewards come almost entirely from recall skills. Nonetheless, the issue is so important that it must be addressed in that what an examination rewards will control what is taught and what is learned.

7.4.4 Course Guidelines

The learning experiences related to the Functional English course were summarised in section 7.2. Several of these features were identified as being a facilitator in relation to the development of critical thinking skills. Among these, the following were stressed frequently (see section 7.2 to 7.2.5) and are now summarised:

- (a) *Course guidelines*: these offered a clear framework and excellent resources
- (b) *Absence of prescribed textbook*: the learner was set free from the drive to complete and memorise content
- (c) *Student-centred learning*: the traditional model of the teacher as information dispenser was altered
- (d) *Group activities*: students were encouraged to interact with each other, allowing ample opportunities for questioning, dialogue, debate....

It is evident that the course guidelines provided a structure that was flexible and encouraging and that these features enabled the teachers to widen the skills taught in helpful ways.

7.5 Conclusions

Apart from the five observation sessions, all the other data gathered reflects the perceptions and opinions of teachers and students and are based on their own experiences. Thus, the overall conclusions must be treated with care in that their opinions although honestly held may not reflect reality accurately.

For example, the perceptions of both students and teachers relating to the nature of critical thinking developed as a result of being involved in the Functional English course. However, the development was not the same for both groups. Students had started to understand the central role of questioning. Their conceptualisation of critical thinking did not seem to develop much although they were beginning to identify some of the skills of critical thinking.

On the other hand, the teachers unsurprisingly had a clearer understanding of the nature of critical thinking and this developed only slightly during the course. Nonetheless, their views tended to reflect a skills based approach (thinking logically, thinking rationally, weighing ideas and conclusions, analysing and evaluating, investigating reasons and consequences, avoiding personal biases) and were beginning to see the central role of questioning (what, when, why, how).

When it came to considering how best to develop critical thinking skills, students and teachers were very enthusiastic about the activities which were integral to the course guidelines. The lasting impression from the observation sessions was of enormous student teacher involvement, vibrant activity, enthusiasm and vigorous discussion involving the entire student teacher group. It was very clear that teachers used the course guidelines with flexibility and considerable imagination. Many strategies were observed: working in pairs, groups, brainstorming, discussing, evaluating, making presentations, experiencing critical comment from teacher and peers. Several of the tasks were very much related to real-life situations, increasing potential interest and relevance.

Students were given opportunities to discuss, weigh options or evidence, evaluate ideas or options critically, to analyse, and to look for alternative ways of saying and doing things. All these skills are highly relevant in the context of critical thinking. The observer was left with the impression that some critical thought was underpinning many of the ideas that students expressed.

When asked to consider the possible facilitators and barriers that might help or hinder the development of critical thinking skills, there was general agreement that the role of the teacher was critical. Thus, the teacher was in a position to offer examples of critical thought simply by the way they presented their teaching. However, it was seen to be important that teachers encourage questioning which was productive in nature and gave students opportunities to respond to such questioning in an unthreatening atmosphere. The students were very positive that their teachers had provided such a learning environment. Perhaps the best way to develop critical thinking skills is to put students in learning situations where the use of such skills is not only encouraged but perceived to be of value. It seems that the teachers of the Functional English course had succeeded to a large extent and this may reflect the quality of the course guidelines.

It has to be recognised that the students have come through a system which encouraged memorisation and recall. Despite this, the students were enthusiastic to move beyond memorisation and they seemed to welcome opportunities to develop wider skills with enthusiasm. A major problem exists with the examinations where students were aware that formal end of course written papers tended to reward recall. The teachers were enthusiastic about the assessment opportunities during the course and the way these could be employed to reward wider skills. However, neither students nor teachers really addressed the issues of how to measure the development of critical thinking skills. The classroom observations certainly suggested that this development was occurring successfully but measuring this at an individual level will certainly not be easy.

Chapter 8

Discussion and Conclusions

*Critical thinking is thinking about your thinking while you're thinking
in order to make your thinking better.*

Richard W. Paul

8.1 Introduction

The quotation above encapsulates the focus and outlook of this thesis which sets out to investigate the perceptions of students and teachers relating to the nature of critical thinking and their views of the facilitators and barriers in the development of critical thinking skills before and after studying a Functional English course. The research questions to investigate these views were:

- (1) What are English teachers' and students' perceptions of critical thinking before and after studying Functional English course in ADE/B.Ed (Honours)?
- (2) What do teachers and students consider to be facilitators and barriers in fostering critical thought through the Functional English course?
- (3) To what extent does the delivery of the course foster development of critical thinking in the classroom?

This chapter brings together the findings from all the sources of information: course documentation, questionnaires, focus groups, interviews and observations. As discussed in chapter 2, the origin of the course was the generic guidelines developed by the Higher Education Commission in Pakistan (in the light of Education Policy 2009) for university and college courses and, which advocates the development of critical thinking (HEC, 2012). This study was conducted because the guidelines lacked details on how critical thinking was conceptualised and made only occasional references to the skills that might be involved in the process or skill set. The HEC documentation also gave no indication about how such a skill set might be assessed. However, the move towards semesterisation, with assessment no longer all taking place at the end of the course, allows greater scope for assessment of skills like critical thinking. This allows greater flexibility and university teachers can develop a wider range of assessment and distribution of marks approaches, some to be employed during the course.

Working with USAID, HEC developed guidelines for a Functional English course (a core course in all degrees in Pakistan) and the study considered their implementation in the

context of the development of critical thinking and the skills that might make up critical thinking. This study has presented a working definition of the concept of critical thinking and the skills that might make up critical thinking (see figure 3.7). This working definition has been derived from the vast literature available on the subject, taking into account the Policy and Higher Education documents. The learning outcomes for the BEd Honours programmes set by the Pakistan Higher Education Qualification Framework (HEC, undated) stress the development of cognitive skills in undergraduates to enable them ‘to identify, analyse, synthesise and evaluate information and concepts from a range of sources’ and ‘to review, analyse, consolidate and synthesise knowledge to identify and provide solutions to complex problems with intellectual independence’. Numerous writers (including Ennis, 1985; Facione, 1990; Paul, 1992; Willingham, 2007; Halpern, 2014) indicated the same skills are required in order to develop critical thinking. Based on this, in this study, critical thinking is conceptualised as purposeful thinking that generates skills such as analysis, evaluation, weighing evidence, considering options, making judgements, all of which require appropriate questioning. (figure 8.1).

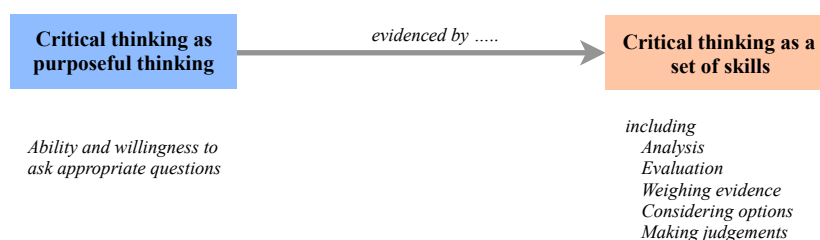


Figure 8.1 Concept of Critical Thinking Adopted in this Study

The population under consideration was the cohort studying the Functional English course as part of ADE/BEd (Honours) qualifications in 3 Universities and 2 Colleges, these being all the institutions offering this course in Hazara Region as a pilot. These students were being trained as school teachers and, therefore, offered the possibilities of gaining insight into their views about how, in due course, they might seek to develop critical thinking skills with their own students.

8.2 Main Findings and Discussion

The main findings and discussion is structured under a number of themes emerging from the data. The findings are related to the literature where appropriate. The themes are:

1. Functional English Course Guidelines
2. Perceptions of Critical Thinking
 - Role of Activities in Fostering Critical Thinking skills
 - Role of Questioning in Fostering Critical Thinking Skills
3. Facilitators and Barriers in Developing Critical Thinking Skills

The comprehensiveness of the course guidelines, perceptions of critical thinking and role of activities and questioning were prominent themes emerging from the focus group and interview data along with perceived facilitators and barriers in the development of critical thinking. The observations were designed to look for any evidence that critical thinking skills were being encouraged and employed. Observations provided the researcher with a first-hand opportunity to experience and observe the classroom where it was seen that thinking skills were being practiced frequently during different activities. There was ample evidence to indicate that the Functional English course guidelines were being followed to seek desired results: improved language skills and use of critical thinking skills.

These themes are now discussed in more detail.

8.2.1 Functional English Course Guidelines

The discussion of the course documentation showed the aim is to move the learning of English away from a written grammar-based approach to a style of learning with much greater student involvement and the encouragement to think, question and challenge, often by means of classroom group activities (pair work, role play, discussion). Although investigation of critical thinking is the primary focus of this thesis, the study also provides strong evidence that teachers and students saw the course guidelines as offering considerable opportunities to shift the learning approach, with liberation from textbook prescription and content coverage, moving away from the lecture tradition towards more learner involvement.

The course guidelines were considered to be comprehensive in nature and this seemed to be the key reason why the students and the teachers were secure enough not to require textbook guidance. The absence of a textbook was a novelty for Pakistan but this seemed

to make teachers less burdened and supported them to make class teaching much more stimulating. There is considerable evidence that students and teachers like textbook security, where completion of textbook and recall from it may guarantee students good marks in examinations (Government of Pakistan, 2006). However, in a real sense, the Functional English course guidelines offered a flexible substitute for a text book. The guidelines not only outlined the sequence of skills to develop but also provided guidance and online resources for teachers. Teachers and students need a clear framework underpinning the goals for an academic course. The guidelines had a considerable advantage in not only offering such a framework but providing liberty for both teachers and students along with quality resources.

It has to be recognised that a Functional English course by its very nature can be built around the development of skills. However, in many other areas of the curriculum, it may be more important to take the logic of subject content into account although Johnstone (2000) demonstrates the value of taking a very different approach by considering the psychology of the learner rather than the logic of the discipline to be taught. Thus, such courses may need to specify both content and skills, and the role of the textbook in communicating these to both students and teachers may be greater than any necessity for a Functional English course. Thus, history course may well be built around the subject content related to particular period of time while a course in mathematics is often built around the logic of the discipline. In all courses, students and teachers need to know the key landmarks in the area of study. The difficulty arises when a textbook becomes prescriptive, and both students and teachers made this very clear. The success of the Functional English course is dependent on the observation that the guidelines did offer the key landmarks without exerting total control of the learning process (HEC, 2012a).

The Functional English course guidelines advocate numerous learning and teaching approaches in order to achieve the course objectives, including the '*paradigm shift*' from teacher-centred to student centred-learning. Specifically, they argue for, '*pair and group work and active learning strategies, such as role play, debates, presentations, and brainstorming*' (HEC, 2012a, p.9). Both teachers and students considered the interactive classroom as an important factor helping them to think critically. Although the course developers did not appear to follow any particular model for course design, the influence of Vygotsky's socio-cultural theory can be seen as it argues for learning through

interaction and this course encourages an interactive classroom where interaction among groups, peers and with the teacher is highlighted in the course guidelines. Vygotsky (1978) observed that cognitive development involves social interaction. Social environment is important for the development of students as critical thinkers. The way the activities were structured offered a secure framework that encouraged the students to question and to generate skills like analysis, evaluation and weighing evidence in order to seek better ways to communicate. This can be seen as an example of scaffolding.

Students can learn through interaction: interaction with peers, teachers and in groups. Social interaction was important for students in their previous courses as well but they were not given the opportunity to learn through activities which provide them opportunities to interact with their fellow students and teachers. The practice of interaction in a classroom is not encouraged in Pakistan where the '*best*' classroom is where there is pin drop silence (Mehmood and Manan, 2015). Pakistan seems to have the typical Asian cultural outlook, with conformity to group values and thinking (Ng, 2001). Children are raised at home in an atmosphere where there is obedience to elders and they adopt the same behaviour with their teachers in the classroom. Specifically, to question a teacher is considered disrespectful. In such a culture, critical thinking is not encouraged. It is also often a feature in Pakistani culture where questioning has been seen as an element of disrespect to elders including teachers. In such a situation where pin drop silence in class is considered as an achievement, an interactive class with full of vigour and enthusiasm is a new phenomenon which is very much liked by both students and teachers.

The Functional English curriculum guidelines often refer to what are described as pedagogical tasks and this can be seen in the ideas of Nunan (2006). He sees '*pedagogical tasks*' as including classroom activities or actions arising from processing or understanding language. Students found the activities exciting. They had a feeling that they are in charge of their own learning. In considering the new curricula for BEd, several authors (Akbar *et al.*, 2013; Mahmood *et al.*, 2013; Sheikh *et al.*, 2013) have noted that classroom observation of the courses rarely reveals the expected activity being implemented. By contrast, observation of the Functional English course in this study showed the guidelines being implemented with enthusiasm, with teachers and students holding very positive views. There are several possible explanations for the success in the Functional English course. Firstly the teachers involved found the course guidelines

attractive. Therefore, they saw the course holding the possibilities of bringing them benefit in terms of their own learning and teaching. Secondly, the course guidelines not only stated the objectives of the course but they provided practical resources to achieve these objectives. Thirdly, Functional English has an advantage in that it can be taught in ways that emphasise skills rather than content. This approach can be more difficult in some other subject areas where the curriculum is built around the logic of content. Therefore, it may not be easy to transfer the successes in Functional English into other courses unless the course guidelines for other courses follow similar patterns and the teachers are committed to the achievement of wider goal. It is also important that there is institutional support in terms of facilities, resources and assessment procedures. Thus, there has to be a commitment on the part of institutions to support the teachers.

Overall, the course guidelines were very well received. While allowing greater opportunities for the development of the communication skills, the guidelines also offered opportunities for dialogue, debate and questioning. In this way, they did offer scope for the development of the skills related to critical thinking (see figure 8.1), addressing the third research question.

8.2.2 Perceptions of Critical Thinking: Nature and Development

The findings and discussion related to the perceptions of critical thinking of students and teachers address the first research question. This study strongly suggests that the participants in the Functional English course thought that it did provide opportunities to foster critical thinking in students. The evidence shows that there was a wide variation in the perceptions of students in relation to critical thinking at the very start of Functional English course (Phase-I). Some students focussed on the word '*critical*' and saw critical thinking in terms of criticising others. Others had the general idea that it involved questioning what was taught. Some saw it in terms of analysing or evaluating. The data shows that about one third of the students seemed largely unaware of the concept of critical thinking before the course. When the issues were discussed in Phase-I focus groups, they appeared to lack confidence and were reserved, not wishing to express views. There are two possible reason for this. Firstly, many students started with the traditional Pakistani view that critical thinking means being critical in a condemnatory sense. Given the hierarchical nature of society, this is an unacceptable approach in Pakistan (Hoodbhoy,

2009). The other reason probably relates to what might be called intellectual insecurity. They were not clear in their own minds what critical thinking was and, therefore, tended to be hesitant to offer much comment.

Towards the end of the Functional English course, the evidence suggests that their understanding of the nature of critical thinking had changed considerably when compared to the position at the start of the course. Although there is still diversity in the views of students regarding conceptions of critical thinking, they all stated that the Functional English course made them think in some way. There seemed to be a recognition of the role played by '*asking questions*' in assisting their thinking although whether they understood the specific nature of the types of questioning required to underpin critical thinking is uncertain.

Overall, the Phase-I data are consistent with a student teacher view that learning is memorisation, and the teacher and textbook were part of the knowledge provision. Thus, the students came to the new Functional English course with this kind of view of their learning. In this sense, they were very much in the lowest stage of the developmental scheme observed by Perry (1999) where knowledge is seen as 'black-and-white' and the teacher is seen as dispenser of such knowledge and is beyond contradiction. Although their views of the nature of critical thinking were diverse, they saw the extent to which a course offered scope for thinking and understanding as a key criterion for judging the value of a course.

Before starting on the new Functional English course, the teachers had also come from a background where memorisation and recall dominated. They were brought up in an education system that was teacher-centred and there was a very little scope for students to participate in any classroom activities. Although this approach had offered them a route to academic success, the teachers were unanimously attracted by the course guidelines with their emphasis on a much wider range of skills as well as suggestions about all kinds of activities that moved well away for the traditional lecture route. At the same time, it is important to note that this particular group of teachers may be atypical in that many had opted into teaching this course, some even coming from disciplines unrelated to English language learning. In fact, four teachers drew attention to the fact that the quality of the course guidelines had attracted them into teaching this course. It can be suggested that for

these four teachers it was an opportunity to experience a learning environment that they wished to experience as students.

The perceptions of teachers in relation to critical thinking in Phase-I were variable. The teachers, like the students, saw possibilities for thinking development, but were able to be slightly more precise in defining critical thinking by referring to some specific skills. They all recognised the importance of critical thinking and considered critical thinking skills as essential within Higher Education but some saw this in terms of specific skills like: *'judge, weigh, consider, analyse and evaluate, reaching conclusions about, assessing....'*. The teaching skills needed to encourage the development of critical thinking skills were, as might be expected, less obvious at the outset. It is interesting that their perceptions did not change much afterwards in Phase-II.

There is some evidence that student teacher views of the nature of critical thinking changed considerably over the period of the course between Phase I and II. Not only did they consider the course to have given them increased scope (compared to their previous English course) for critical thought, but they also welcomed this and found it a positive feature. In the Phase-II focus groups, one of the more marked differences was the way that the idea of questioning and challenging was much more overtly included in responses. In the process of the Functional English course, there was no teaching about the nature and importance of critical thinking. The shift in views of the nature of critical thinking and the important role of questioning observed in Phase-II focus groups reflected the experiences they had had during the course. They frequently referred to the place and value of group discussions, role play, and presentations in this context. Some students overtly related the opportunities to question to the specific classroom activities. However, many of the students emphasised the value of questioning and did not relate this explicitly to the classroom activities.

This finding perhaps suggests that a way to develop critical thinking in a Pakistani context is through interactive activities. Such activities can be described as learning situations where individual students interact with each other as well as with written materials in order to answer questions or decide the best way forward. In the Functional English class rooms, the course involved a large number of such activities which focussed on a wide range of aspects of communication in English. Interaction can also involve student-teacher dialogue and this was also seen in the class activities. Much lies in the way a course is designed and how learning is encouraged. Thus, students gained a better conceptualisation

of the nature of critical thinking by means of the way they were asked to undertake various activities, all seeking to achieve goals in relation to Functional English. This demonstration of an interactive student-centred classroom could serve as a useful model to be applied to other courses. This fits with the approach advocated by Solon (2003, p.36) which he called an '*infusion approach*' (see chapter 4). While the Functional English course aimed for the development of language skills as a central goal, the way the course was designed allowed for critical thinking skills to develop along the lines described by Solon.

Many have noted that the goal of critical thinking is to gain '*better*' answers to '*problems*' (Sternberg, 1986) and this idea was apparent when students were developing ways of communicating that were more effective. This was a feature of many of the activities of the course where the goal was to develop the best way forward in relation to some aspect of communication in English. Underpinning many studies is the recognition that critical thinking involves questioning (eg. Duron, Limbach and Waugh, 2006; Saeed *et al.*, 2013; Manan and Mehmood, 2015). Questioning was referred to repeatedly by both teachers and students. However, the observations of classes frequently showed that the questioning being employed was often directed at weighing evidence, evaluating and looking for alternatives.

An important insight noted by many authors is that critical thinking involves the cognitive and the attitudinal (Al-Osaimi *et al.*, 2014). Thus, a student needs to know how to think critically but also be willing to think this way, the latter being especially important in a context where examination rewards largely come for successful recall, with the skills of critical thinking almost never rewarded (as in Pakistan). Students see no value in moving outside recall of provided information. The responses of students and teachers also tended to generate a list of skills (like: analysis, evaluation, weighing evidence, considering options, making judgements) that might be regarded as part of critical thinking. Many students and teachers did perceive critical thinking to be of value in generating '*better*' answers to '*problems*' (Sternberg, 1986).

Following the literature analysis, critical thinking is conceptualised here as purposeful thinking that generates skills such as analysis, evaluation, weighing evidence, considering options, making judgements, all of which require appropriate questioning. Many of these features were evident with the teachers and students who used similar sets of skills

(analysis, evaluation, to decide what is right and wrong, considering best options etc). The role of questioning was also evident although the idea of a way of thinking was much less apparent. Questioning was encouraged in the course activities.

Role of Activities in Fostering Critical Thinking Skills

The students and the teachers were very positive about the activities that were integral to the course. They did see these as offering opportunities to employ some of the skills that are part of critical thinking. Class observations also offered extensive evidence that questioning, challenging and debating were occurring in the group activities. Indeed, it was noted that the way the students undertook the classroom tasks set for them showed signs of critical thinking occurring. For example, information was challenged, alternative ways of saying and doing things were considered and they applied a way of thinking that seemed always to be seeking the best way forward.

There is considerable evidence that strategies such as role play, debates, presentations, and brainstorming are helpful in the development of critical thinking and related skills (Byrne and Johnstone, 1983; Johnstone, Percival and Reid, 1981). This has been confirmed in numerous studies and meta-studies more recently, covering wide areas of the curriculum including English learning (eg. Gokhale, 1995; Duron, Limbach and Waugh, 2006; Masduqi, 2011; Yusuf and Adeoye, 2012; Abrami *et al.*, 2014). These studies show that brainstorming, pair work, group work, presentations, role play and so on are considered effective tools for enabling students to think and respond. Based on the findings related to the Functional English course, all of these tools provide opportunities for the kind of appropriate questioning that underpins critical thought.

This exemplifies an important principle. Giving learners scope and encouragement to ask such questions provides the basis by which critical thinking can be developed. Most courses in Pakistan are defined by the content to be covered and the teacher is seen as the dispenser of that content, with the examinations rewarding recall of the content. If critical thinking is to be developed, then courses have to be re-conceptualised to allow for appropriate questioning, central to critical thinking. In this way, the activities which were an integral part of the course did provide excellent opportunities for question and challenge. Thus, the Functional English course seems to have offered a model for a useful way forward.

The classroom observations made during the course revealed a very marked change from typical courses in Pakistan. By contrast, the five observation sessions were characterised by vibrant activity: student teacher involvement, dialogues, discussion, debates. Students were involved in practical tasks and they worked together vigorously and enthusiastically to complete these. Many strategies were observed: working in pairs, groups, brainstorming, discussing, evaluating, making presentations, experiencing critical comment from teacher and peers. In all of this, there was clear evidence of many opportunities to question, to weigh evidence, to evaluate ideas, to look for alternatives.

The activities suggested by the course guidelines had clearly been taken up enthusiastically and creatively by the teachers. Students were responding to these with obvious enthusiasm, with 100% participation being observed as a norm. Given the nature of these activities and the way they were being handled by the teachers, there was every possibility that the skills related to critical thinking were being developed. There was much encouragement to question. The questions were now less of a factual nature but they were much closer to the concept of questions directed at what was presented and its meaning and significance. Questions were continually being asked about the best way to undertake a task or the best way to communicate in a given context. This meant weighing evidence, considering alternatives and challenging ideas. All these skills are elements in critical thought.

The Role of Questioning in Fostering Critical Thinking Skills

Both students and teachers developed an awareness of the importance of questioning to develop interaction and critical thought, consistent with the findings of Duron, Limbach and Waugh (2006); Saeed *et al.* (2013); Manan and Mehmood (2015). However, while students and teachers saw the importance of questioning, they were not very clear about the kind of questioning that was needed to stimulate critical thinking. In many areas of teaching and learning, questioning tends to be more related to questions of fact (eg. What is the capital city of Pakistan? What is the second law of thermodynamics?). However, the questions in an interactive student-centred classroom need to be specifically focussed so that they can challenge a number of aspects of classroom activity: what is being taught, the source of the material, the potential bias of the learner, and how the new information relates to what is already understood.

Students and teachers saw thinking and questioning as connected and offering possibilities in the course for developing critical thinking skills. While Duron, Limbach and Waugh,

(2006) have argued that the central skill in critical thinking involves questioning. He uses the words 'question' and 'questioning' 56 times in this paper but describes the nature of the questioning that is integral to critical thinking as 'appropriate questioning'. However, they do not give examples of specific pedagogical techniques but they emphasise the need to develop questioning techniques and that the questions generated have to be appropriate in the sense of focussing on analysis, evaluation, weighing evidence, considering options and making judgements. They see one important feature in fostering critical thinking skills being interactive discussion and debate. They also stress the importance of feedback as this, in itself, is likely to generate critical thought. Indeed, critical thinking implies reviewing, refining and improvement. Much of this is reflected in the Functional English course guidelines with their recommended activities for both students and the teachers.

This questioning approach takes the line of seeing critical thinking as a way of thinking that generates various skills (analysis, evaluation, weighing evidence, considering options, making judgements). This approach provides a framework for interrogating any formal teaching and learning situation. In observing classes in the Functional English course, there was considerable evidence that the questioning was in fact 'appropriate' and 'productive'. Students were encouraged to ask questions about what they were being told or what they were reading. They explored any agendas that the speakers or writers may have. They could challenge biases in themselves or each other. They could also question the meaning of what was spoken or read and seek for better ways to communicate clearly.

8.2.3 Developing Critical Thinking Skills: Facilitators and Barriers

Considering facilitators and barriers addresses the second research question. The findings strongly suggest that students and teachers considered several aspects of the course as facilitators. As before, facilitators and barriers will be considered together for the absence of a barrier is often to be seen as a facilitator while the presence of a facilitator often undermines the barrier.

The main aspects are:

- * The Functional English course guidelines
- * Teacher's role as facilitator, encourager, friend
- * Assessment criteria
- * Students academic background and domestic issues

Overall, students and teachers indicated the same facilitators and barriers in the development of critical thinking skills. This included the course guidelines with activity based learning, teachers methodology, student-centred classroom and assessment criteria. These themes are interlinked, one supporting or leading to another. These are sometimes so intertwined that it is difficult to separate them under different headings. Each is discussed in turn in relation to findings from the literature.

The Functional English course guidelines

The course guidelines emerged as a strong theme in all the discussion. These were not only seen as a novel feature of the Functional English course but also as a facilitator in developing critical thinking skills. The details of the course guidelines and the positive views of participants have been discussed in chapter 4 of this study. Students and teachers found the course guidelines a major facilitator in nurturing critical thinking skills in students. Bernasconi (2008) argued that the English classroom offers a unique environment for fostering critical thinking skills. This is supported in the findings of this study where the Functional English course provided opportunities to students to practice critical thinking skills.

The participants involved in this study reported that their previous English course was content-based and learning facts was emphasised through assessment but, in the Functional English classroom, students were involved in more independent learning through different activities like working in pair and group, role play, presentations etc. Some studies (Reed and Kromrey; 2001; Chaffee, 2008; Halpern, 2014) argue that overloaded curricula and that the content-driven nature of courses in Higher Education hinders the development of critical thinking and this is what the participants of this study also mentioned. They were very positive about the fact that Functional English course was not content driven and the guidelines give comprehensive support.

Firstly, the guidelines supported the development of critical thinking along with development of communication skills and this is consistent with the the views of Brown (2004) who states that language programmes should encompass the development of critical thinking among learners. Secondly, the way the activities are designed offers considerable opportunities for appropriate questioning that underpins critical thinking.

It can be seen from the overall findings that the English classroom does offer opportunities to develop critical thinking skills and, in the case of this study, the course guidelines proved to be a facilitator in nurturing critical thought in students. The previous English course structure was a hindrance as it was content-driven and did not offer opportunities to develop critical thinking skills.

Teacher's role as facilitator, encourager, friend

The traditional role of the teacher is very much that of an authority figure providing information. In contrast, in this study, teachers have emerged as a facilitator, encourager and friend. Students felt connected with their teachers by means of classroom activities and discussions. In the Functional English course, the role of the teacher moved more towards a manager of learning along with the key task of posing questions and challenges. The students saw the teacher role becoming closer to that of a facilitator, encourager with a friendly attitude. In this, the teacher role is central not only in encouraging appropriate questioning but also in establishing a class atmosphere where this is treated as normal, acceptable, and valuable. The encouragement of a teacher is vital for the progress of students.

Assessment criteria

One of the perceived barriers in Phase-I was related to assessment. Students were hopeful that the way the semesterisation programme had reduced the dominance of end of course written examinations would release them from an assessment system dominated by recall. In Phase-II, students and teachers saw the possibilities of assessment under the semester system being a facilitator. In this new assessment system, a much wider range of skills were being assessed. However, neither the teachers nor students offered any clear pointers about how the development of critical thinking might be assessed other than the teacher view that they could see its development in the activities. It might be thought that the development of critical thinking skills will lead to better understanding. However, the findings of Ausubel (1978) showed that meaningful learning is unrelated to teaching strategy while Kirschner, Sweller and Clark (2006) confirm this finding in their review. Students arrived at the course with a background of memorisation and recall. While some teachers saw potential problems coming from student backgrounds, the student teachers participated fully and enthusiastically with all activities in the course indicating that supported adjustment to change is feasible.

It is tempting for teachers to blame the students for lack of success. Here, the teachers were much more positive in outlook but they did identify areas where students faced disadvantages. Students were aware of some of them as well. Students and teachers had been brought up in a system which rewarded recall and it is difficult to change the paradigm of thought. Thus, students revelled in the freedoms and the opportunities offered by the course. They did not seem to be hindered by their past experiences. The way the teachers operated the course also showed a great willingness to change from traditional ways of teaching. All of this does suggest, as mentioned above, that past educational experiences are not too great to be overcome. The student teacher group seemed enthusiastic for something different.

Buskist and Irons (2008) have summarised much of the literature in bringing together the likely facilitators and barriers. Time pressures in overcrowded curricula often make it easier and faster simply to memorise and this leads to examination rewards. Students have gained their past success from this approach in Pakistan while their teachers are also the product of the same system. Teachers may still consider that any student examination success may be undermined by the time spent on skills like critical thinking.

Student Background

The students' academic background (and personal issues) was a factor highlighted as a facilitator or barrier in general. The key issue related to students who were unable to attend the elite schools (English medium) saw themselves as at a disadvantage. This made them less confident and shy (see chapter 2). Apart from that, a few students mentioned their family and personal issues which they considered as a barrier to their overall learning and development of critical thinking skills also.

The overall findings can be summarised (figure 8.2 overleaf).

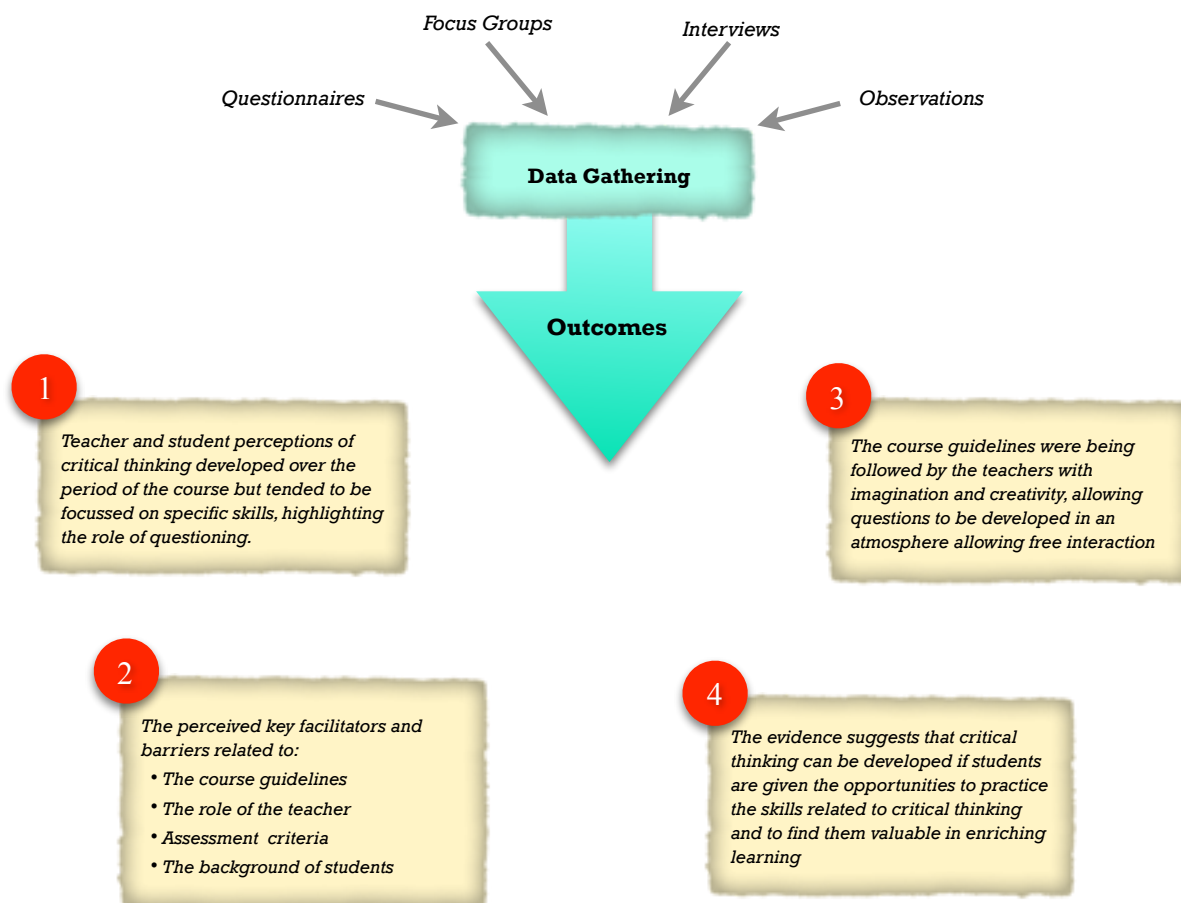


Figure 8.2 Summary of Findings

8.3 Strengths and Weakness of the Study

The study involved a large sample and the way the data were gathered provided for 100% participation and this strengthens the generalisability of the findings at least within a Pakistani context. Data were gathered in multiple ways allowing for insights to be confirmed along with the insights from one approach being enriched by the insights from another. The Functional English course was chosen because it is one of a very small group of courses which are mandatory for all the students and this broadens the nature of the sample which is drawn from diverse backgrounds. However, this course was also a suitable choice in that the recently revised guidelines opened strong possibilities for the development of critical thinking. Another factor was the fact that my own background is in English and I had previous experience in teaching and in relevant course design although I was not involved in this particular course.

The study was limited to only 5 institutions in Hazara Region of Khyberpakhtunkhwa province, these being the only institutions in the region involved in this particular course. These institutions may or may not be entirely typical of Pakistan overall. Time and

security issues prevented a wider sample being sought. The questionnaires, focus groups and interviews all depended on self-report approaches and, no matter how honest the participants, their perceptions may be incomplete. This is a major weakness in that it was clear that the conceptualisations of the students and their teachers of the nature of critical thinking were, especially at the outset, incomplete. This is to be expected given the nature of their previous educational experiences where learning was conceptualised as memorising and the idea of asking questions was largely a foreign notion. One way to compensate for the limitations of self-report was to observe five lessons in five different institutions. This provided an opportunity to see if what was being reported was consistent with what was being observed. In fact, the data from the various sources presented a broadly consistent picture and this strengthens the validity of the study. Inevitably, researcher observations are always open to potential bias as well as the risk that the presence of an observer may alter the situation being observed. To avoid any potential bias in observations, the data from the five observation sessions largely consisted of a record of what was seen and heard, with the minimum of interpretation. In addition, there was no evidence that the presence of observer had any significant effect in that the classes were involved in sets of activities, apparently oblivious to my presence.

8.4 Future Work

An important area for future study relates to how evidence can be gained that critical thinking has been developed in learners. It might be supposed that critical thinking would generate better assessment outcomes but the relationship between critical thinking and performance may be far from straightforward. Thus, an examination may or may not reward critical thinking skills. For example, if the examination simply rewards recall, it is possible that critical thinking may even hinder performance. The lack of any neat connection between teaching strategy and understanding was well demonstrated by Ausubel (1978) long ago. It might also be supposed that critical thinking would assist in heightened positive motivation. However, this does not assist much for motivation is difficult to assess, being so highly multivariate. It is to be hoped that the development of critical thinking skills would enhance performance and motivation.

All this points to the need to develop better ways to gain evidence that critical thinking has been developed. There might be several ways forward:

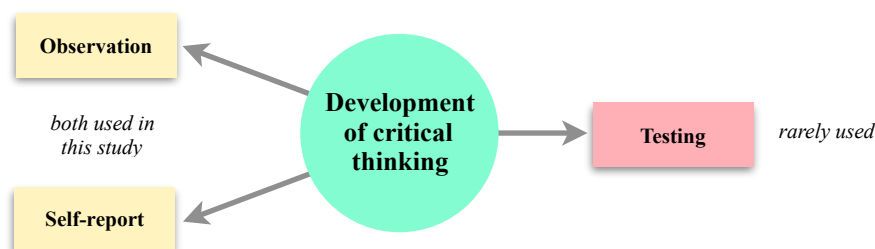


Figure 8.3 Gathering evidence for critical thinking

In the study here, self-report and observation were both employed and previous studies have adopted both approaches. However, devising a test that seeks to measure critical thinking is less common in the literature. In one example (Al-Osaimi, 2012; Al-Osaimi *et al.* 2014, 2015), related to one subject area, the questions were devised in such a way that those who could think critically would perform much better. This assessment was tested rigorously and the outcomes compared to numerous other measurements. From this they were able to show that their critical thinking test was not measuring either recall or understanding [which they saw as the ability to apply knowledge in a novel situation, this encompassing Bloom's original 'comprehension' and 'application' (Bloom, 1956)]. Future work might consider possibilities to measure the development of critical thinking in the context of Functional English, following this same principle.

There are two other major areas of enquiry for the future. Assuming that progress was made in the development of critical thinking skills with the students in this study, are the skills persistent in the sense that they will be used over more extended time? Making the same assumption, can evidence be gathered that such skills transfer in any way into other subject areas for these students are undertaking a degree with numerous course options? There is evidence that students are strategic in the sense that they adopt learning strategies that they perceive as helpful and what is perceived as helpful is influenced by the way a course is presented and assessed (Entwistle, 2001).

Another area for future work relates to the activities (group and pair work, role play and discussions) which were integral to the Functional English course. It would be possible to develop a range of such activities and test these out in action to explore if any particular feature or features of such activities are essential in order to enhance critical thought. However, the evidence gained in this study suggests that strong encouragement is needed for the learners as well as opportunities to generate the kind of appropriate questions that underpin critical thinking, the learners being convinced that critical thinking is valuable.

One of the clear findings from this study has been the diversity of how critical thinking has been conceptualised. This relates to the considerable confusion in the literature about many aspects of thinking, a point noted by Al-Ahmadi and Reid (2011). In their work, they were able to separate scientific thinking from critical thinking by looking for the key underpinning feature that made each unique rather than depending on lists of skills that might arising from the particular way of thought. There is considerable scope to explore further the nature of critical thinking, to see whether the model adopted here which, although based tightly on the literature, is the best way forward. However, the outcomes from the Delphi approach (Facione , 1990) do not suggest any simple ways forward.

8.5 Recommendations

The findings from this study in relation to the Functional English course are encouraging in the sense that there was evidence of critical thinking skills being used and perceived as valuable. This suggests that parallel guidelines across other disciplines areas should be developed. This may not be quite so easy in that other disciplines are often more tightly tied to a curriculum content to be covered. Nonetheless, projects could be initiated immediately, using the Functional English course guidelines as a template.

It was noted on several occasions that there were requests for more training related to critical thinking. To achieve this effectively requires an investment of time and money. It is possible that good ideas might be found in other countries, involving setting up of training workshops led by overseas personnel. Several authors have argued that progress can be made through a series of small changes (Cordingly, 2007; Scanlan, 2006; Cosgrove, 2011). This opens considerable possibilities but does raise the question about who trains the trainers? However, this is an area where investment would be useful, with evaluation being set up to explore the effectiveness of the training.

The present investigation is important for curriculum developers, educators and teachers to help them review the current issues of higher education at a policy level, especially with regard to the development of critical thinking. The views of students as prospective teachers and English teachers in this study offer pointers to help in the re-design of a syllabus in order to promote critical thinking in university level education. When it is realised that there is a need to develop critical thinking to equip students to face the challenges of the modern world, then the role of critical thinking in all university courses

will be enhanced. Encouragement to use more student-centred approaches might be a useful way forward. University education would be assisted if school courses also laid emphasis on critical thinking skills and school curricula could be adjusted to this end.

In this, the way the curriculum was specified and the encouragement to allow the learners to dialogue, debate and argue offered considerable opportunities for the development of skills like critical thinking. What was observed repeatedly was the fact the the students enjoyed the freedom to be involved in this way. Of course, more student-centred learning approaches were a novelty for the students but they seem to revel in the opportunities these approaches offered.

The final recommendation relates to assessment. As long as assessments predominantly reward recall of information and procedures, this will always hinder the development of wider skills in that students will perceive no rewards. In the Functional English course, the way the course was set out in the guidelines offered the students a level of freedom that they had rarely experienced before. However, they were aware of assessment problems although the way the semesterisation had been set up did open possibilities. This is an area needing much more exploration. However, there needs to be an agreed move away from the dominance of recall in formal examinations.

8.6 Endpiece

In a Pakistan context, the trenchant comments by Hoodbhoy are worth repeating:

'Closed minds cannot innovate, create art and literature, or do science. Modern education is all about individual liberty, willingness to accept change, intellectual honesty, and constructive rebellion. Critical thought allows individuals to make a revolutionary difference and to invent the future. Else, they will merely repeat the dysfunction of the past'.

(Hoodbhoy, 2009, p. 592)

This study seeks to make a modest contribution to the development of an understanding of the nature and significance of critical thinking that seems lacking in higher education in Pakistan. It is recommended that explicit efforts as suggested above should be made to raise awareness of the need to develop critical thinking skills to enrich the student educational journey and equip them for life beyond academia.

This study has offered some clarification on how critical thinking might be conceptualised. It has shown that the way a curriculum is specified and key resources offered provides a template for future curriculum development. The study has also shown

that, despite their previous educational experiences, both teachers and students were enthusiastic to move their learning well beyond recall and memorisation and the development of wider skills like critical thinking was embraced enthusiastically. This study provides strong evidence that the course guidelines offered considerable opportunities to shift the learning approach from teacher-centred to student-centred with much student involvement and the encouragement to think, question and challenge.

If this study has made a small contribution in encouraging more progress in developing critical thinking with Pakistani undergraduates, then it will have served its purpose. At the same time, it has revealed what may be possible and some of the future work that still needs to be undertaken.

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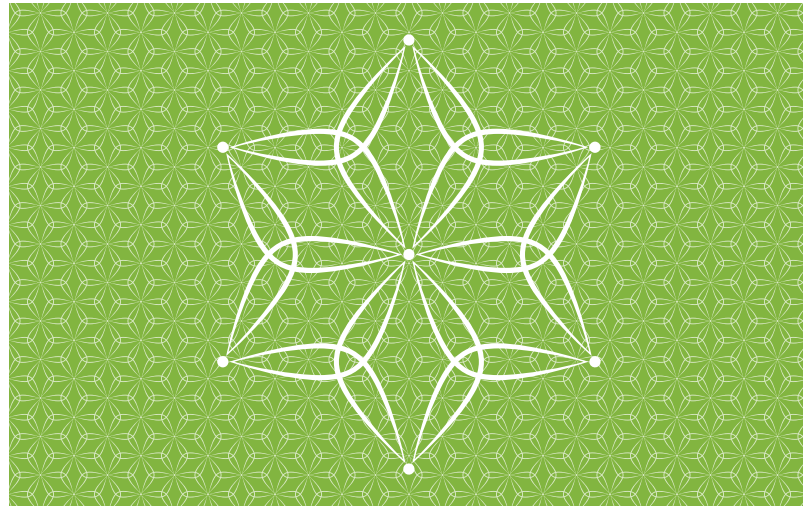
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Appendix 1 - Course Guidelines
Key Features



semester

1

Functional English - I

COURSE GUIDE

Associate Degree in Education/
B.Ed. (Hons) Elementary

2012



Higher Education Commission

ENGLISH I

A one semester course, carrying 3 credits, lasting about 16 weeks, the purpose of this course is to develop the English-language proficiency of prospective elementary school teachers and to help them become confident in reading, writing, speaking, and listening to the English language.

Instructors use a variety of assessments in this course to assess learning. It is recommended that course work count toward at least 50 per cent of Student Teachers' final grades. Instructors will advise which course work assignments will be graded. The remainder of the grade will be determined by mid-semester and end-of-semester examinations.

Semester outline

1 UNIT 1: Introductions (3 weeks, 9 hours)	
	This first unit will provide Student Teachers with an opportunity to interact with one another in oral and written forms. It will serve to introduce them and help them develop conversations through suggesting simple words and phrases to describe people, preferences, and other conversation topics in a logical sequence.
Week #	Topics/themes
1	Making introductions <ul style="list-style-type: none"> • Making effective self and peer introductions • Taking useful introductory notes
2	Expressing requests and enquiries <ul style="list-style-type: none"> • Forming appropriate requests and enquiries • Responding to enquiries • Requests versus commands
3	Practicing practical classroom English <ul style="list-style-type: none"> • Using different classroom language routines and functions for effective classroom management • Developing effective classroom language by following provided examples • Demonstrating and practicing practical classroom language routines
2 UNIT 2: Social interaction (4 weeks, 12 hours)	
	This unit is aimed at developing Student Teachers' social interaction in English and expanding their interpersonal skills. Through class activities, they actively converse in formal and informal contexts to congratulate, express gratitude, make invitations, and respond to speakers in oral and written contexts.
Week #	Topics/themes
4	Greetings <ul style="list-style-type: none"> • Greeting friends and family on different occasions and for different reasons • Responding to a positive event • Using formal greeting expressions appropriately
5	Gratitude <ul style="list-style-type: none"> • Using formal and informal expressions of gratitude appropriately • Reading a story that uses expressions of gratitude • Writing a formal letter to say thanks to a teacher, parent, or friend
6	Invitations <ul style="list-style-type: none"> • Demonstrating the use of formal and informal expressions of invitation • Developing verbal and written skills for invitations • Responding to invitation requests by accepting or declining
7	Regrets <ul style="list-style-type: none"> • Expressing regrets orally and in writing appropriately • Saying sorry and accepting apologies

3 UNIT 3: Giving and following directions (3 weeks, 9 hours)

	In this unit, Student Teachers learn how to follow directions from a map as well as how to give directions to search for a location or specific information. They learn how to follow and provide clear instructions.
Week #	Topics/themes
8	Following and giving directions <ul style="list-style-type: none"> • Following directions from a map • Giving directions to a location in oral and written forms • Reaching a destination
9	Giving clear instructions <ul style="list-style-type: none"> • Carrying out instructions • Structuring instructions • Writing clear instructions
10	Designing instruction manuals <ul style="list-style-type: none"> • Comparing the logical order of their format and the language of instruction for developing a critical understanding of the essentials of a manual, guide, or prospectus • Designing an instruction guide for new students enrolling in college

4 UNIT 4: Sharing experiences (3 weeks, 9 hours)

	In this unit, Student Teachers will engage with different meanings in a variety of written and visual texts through shared, guided, and independent readings of narratives in various genres. Instructors will encourage them to respond to the narrative and imaginative texts by composing stories and sharing them in written and oral form.
Week #	Topics/themes
11	Sharing narratives <ul style="list-style-type: none"> • Reading short stories • Reading excerpts, comic strips, interviews, and other common texts
12	Sharing unique experiences <ul style="list-style-type: none"> • Summarizing and narrating true stories • Solving word puzzles to develop language awareness • Reading short stories and completing exercises to test comprehension • Converting an event into a short story • Using pictures as stimuli for narrative creation • Using songs as examples of personal experience
13	Imaginative texts <ul style="list-style-type: none"> • Identifying imaginative texts • Developing imaginative texts by communicating engrossing stories and descriptions of scenes

5

UNIT 5:

Types of writing (3 weeks, 9 hours)

	Student Teachers will learn how language works and how to critically evaluate texts in terms of effectiveness, meaning, and accuracy. This unit draws Student Teachers' attention to understanding how grammatical patterns change according to purpose and audience.
Week #	Topics/themes
14	Writing styles <ul style="list-style-type: none"> • Changing narration: Converting a dialogue into a report • Converting a story into a news report • Converting a graph or picture into a short report or story
15	Writing mechanics <ul style="list-style-type: none"> • Punctuation and structure • Sentences, sentence fragments, and run-on sentences • Subject-predicate and pronoun-reference agreement
16	End-of-course revision

Appendix 2 Questionnaires and Data

Student Questionnaire Before Functional English Course

Student Questionnaire After Functional English Course

Teacher Questionnaire Before Functional English Course

Teacher Questionnaire After Functional English Course

Student Questionnaire Data

Learning in English

How you see your Experiences

*This survey seeks to find your views about your experiences in learning English
It is a research study being conducted in the University of Glasgow, Scotland
The outcomes may guide plans for future developments
Your answers will be treated with total confidentiality*

Which university or college do you attend?

Gender: ☐ Male ☐ Female Age

What was your last grade in English? (% or grade)

What is the level of your course? ☐ ADE ☐ BEd Honours

What was the medium of instruction before you started your current course? ☐ English ☐ Urdu ☐ Other

Think of **English classes**.

Here is a way to describe your experiences.

interesting <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> boring relevant <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> irrelevant easy <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> difficult

This means that you found the classes **fairly boring**,
but the work was **very relevant** to your studies and
was **neither easy nor difficult**

Use the same method in questions (1) and (2).

- (1) Think of your use of **English in everyday life**
Tick one box on each line

I never use English at home	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	I use English frequently at home
I meet people who speak English	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	I never meet people who speak English
I watch movies in English frequently	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	I never watch movies in English
I rarely read books in English	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	I often read books in English
I use English with my friends	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	I never use English with my friends
I often listen to songs in English	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	I rarely listen to songs in English

- (2) Think of your **Intermediate English course**
Tick one box on each line

I enjoyed the classes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	I did not enjoy the classes
I found the work demanding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	I found the work straightforward
The work was irrelevant to my other studies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The work was relevant to my other studies
I was encouraged to think and question	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	All I had to do was to memorise what is taught
I was encouraged to speak in English	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	I was not encouraged to speak in English
I do not feel confident in communicating in English	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	I feel confident in communicating in English
I liked the way the course was taught to me	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	I did not like the way the course was taught to me
The course gave me little scope for thinking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The course gave me scope for thinking
I did not have access to online materials	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	I had access to online materials

- (3) Think about the way **you like to learn**.
Tick one box on each line.

	<i>Strongly Agree</i>	<i>Agree</i>	<i>Neutral</i>	<i>Disagree</i>	<i>Strongly Disagree</i>
(a) I prefer to learn by reading books.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(b) I have a good memory.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(c) I like to understand things rather than simply memorise them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(d) I find I rely heavily on clear explanations from the teacher.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(e) I learn best when I do things for myself.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(f) I often see ideas in terms of mental pictures.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(g) I am sure I shall pass my examinations.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(h) I like using online resources for learning English	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- (4) Think of the **English course you completed in Intermediate.**

Tick one box on each line.

	<i>Strongly Agree</i>	<i>Agree</i>	<i>Neutral</i>	<i>Disagree</i>	<i>Strongly Disagree</i>
(a) I found the course interesting.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(b) ICT would help me to learn better.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(c) I feel my language skills have been enhanced.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(d) I prefer to learn the facts and then be tested on what I remember.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(e) In order to pass my examinations, I need to study just what the teacher tells me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(f) The course has helped me to understand the structure of language.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(g) The lecture course challenged me to think and to question.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(h) All one has to do in this course is to memorise things.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(i) I have improved my listening and reading skills in English more than I expected.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(j) The course has helped me to analyse the way language is constructed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(k) In exams, I like questions which give me the scope to go beyond what is taught and show my ability to think.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- (5) Thinking of the **reasons for studying English as a second language.**

Tick all the reasons that are true for you

<input type="checkbox"/> It is an important subject in my main discipline	<input type="checkbox"/> It is an easy language
<input type="checkbox"/> It is the main language, in Pakistan, for official communication	<input type="checkbox"/> Most books are in English
<input type="checkbox"/> A functional English course will help me in my professional career	<input type="checkbox"/> This course helps me to think critically
<input type="checkbox"/> I think this course will help me to understand the world	<input type="checkbox"/> I enjoy learning English
<input type="checkbox"/> I am doing what parents encouraged me to do	<input type="checkbox"/> I think my course will lead to good jobs

- (6) Where do you rate yourself on your ability in the following tasks in English?

Tick one box on each line

	Excellent	Good	Fair	Poor
Understand instructions in English				
Make a presentation in your class in English				
Take part in discussions in English				
Write a formal letter in English				
Read text in English with good understanding				
Express your feelings in English				
Narrate a story, using a picture				
Punctuate a text in English				

- (7) Write down any **other benefits** you gained from your **Intermediate English** course (*two sentences only*)

My course in English has helped me to.....

- (8) Imagine you have been appointed to teach your **Intermediate English** course.

*Write down **ONE THING** you would like to introduce to the course.*

I should like to introduce.....

- (9) I should be willing to take part in a follow-up focus group discussion:

Yes ☐

No ☐

If 'yes', please give contact details (name, email and phone):

.....

.....

Thank you very much!

Learning in English

How you see your Experiences

*This survey seeks to find your views about your experiences in learning English
It is a research study being conducted in the University of Glasgow, Scotland
The outcomes may guide plans for future developments
Your answers will be treated with total confidentiality*

Which university or college do you attend?

Gender: ☐ Male ☐ Female Age

What was your last grade in English? (% or grade)

What is the level of your course? ☐ ADE ☐ BEd Honours

What was the medium of instruction before you started your current course? ☐ English ☐ Urdu ☐ Other

Think of **English classes**.

Here is a way to describe your experiences.

interesting <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> boring relevant <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> irrelevant easy <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> difficult

This means that you found the classes **fairly boring**, but the work was **very relevant** to your studies and was **neither easy nor difficult**

Use the same method in questions (1) and (2).

- (1) Think of your use of **English in everyday life**
Tick one box on each line

I never use English at home	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	I use English frequently at home
I meet people who speak English	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	I never meet people who speak English
I watch movies in English frequently	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	I never watch movies in English
I rarely read books in English	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	I often read books in English
I use English with my friends	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	I never use English with my friends
I often listen to songs in English	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	I rarely listen to songs in English

- (2) Think of your **Functional English course**
Tick one box on each line

I enjoyed the classes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	I did not enjoy the classes
I found the work demanding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	I found the work straightforward
The work was irrelevant to my other studies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The work was relevant to my other studies
I was encouraged to think and question	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	All I had to do was to memorise what is taught
I was encouraged to speak in English	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	I was not encouraged to speak in English
I do not feel confident in communicating in English	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	I feel confident in communicating in English
I liked the way the course was taught to me	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	I did not like the way the course was taught to me
The course gave me little scope for thinking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The course gave me scope for thinking
I did not have access to online materials	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	I had access to online materials

- (3) Think about the way **you like to learn**.
Tick one box on each line.

	<i>Strongly Agree</i>	<i>Agree</i>	<i>Neutral</i>	<i>Disagree</i>	<i>Strongly Disagree</i>
(a) I prefer to learn by reading books.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(b) I have a good memory.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(c) I like to understand things rather than simply memorise them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(d) I find I rely heavily on clear explanations from the teacher.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(e) I learn best when I do things for myself.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(f) I often see ideas in terms of mental pictures.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(g) I am sure I shall pass my examinations.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(h) I like using online resources for learning English	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- (4) Think of the
- English course you completed in Functional English**
- .

Tick one box on each line.

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
(a) I found the course interesting.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(b) ICT would help me to learn better.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(c) I feel my language skills have been enhanced.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(d) I prefer to learn the facts and then be tested on what I remember.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(e) In order to pass my examinations, I need to study just what the teacher tells me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(f) The course has helped me to understand the structure of language.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(g) The lecture course challenged me to think and to question.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(h) All one has to do in this course is to memorise things.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(i) I have improved my listening and reading skills in English more than I expected.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(j) The course has helped me to analyse the way language is constructed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(k) In exams, I like questions which give me the scope to go beyond what is taught and show my ability to think.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- (5) Thinking of the
- reasons for studying English as a second language**
- .

Tick **all** the reasons that are true for you

<input type="checkbox"/> It is an important subject in my main discipline	<input type="checkbox"/> It is an easy language
<input type="checkbox"/> It is the main language, in Pakistan, for official communication	<input type="checkbox"/> Most books are in English
<input type="checkbox"/> A functional English course will help me in my professional career	<input type="checkbox"/> This course helps me to think critically
<input type="checkbox"/> I think this course will help me to understand the world	<input type="checkbox"/> I enjoy learning English
<input type="checkbox"/> I am doing what parents encouraged me to do	<input type="checkbox"/> I think my course will lead to good jobs

- (6) Where do you rate yourself on your ability in the following tasks in English?

Tick one box on each line

	Excellent	Good	Fair	Poor
Understand instructions in English				
Make a presentation in your class in English				
Take part in discussions in English				
Write a formal letter in English				
Read text in English with good understanding				
Express your feelings in English				
Narrate a story, using a picture				
Punctuate a text in English				

- (7) Write down any
- other benefits**
- you gained from your
- Functional English**
- course (
- two sentences only*
-)

My course in English has helped me to.....

- (8) Imagine you have been appointed to teach your
- Functional English**
- course.

Write down **ONE THING** you would like to introduce to the course.

I should like to introduce.....

- (9) I should be willing to take part in a follow-up focus group discussion:

Yes ☐No ☐

If 'yes', please give contact details (name, email and phone):

.....

.....

Thank you very much!

Teaching English as a Second Language

How you see your Teaching Experiences

This survey seeks to find your views about your experiences in teaching English

It is a research study being conducted in the University of Glasgow, Scotland

The outcomes may guide plans for future developments

Your answers will be treated with total confidentiality

Gender: ☐ Male ☐ Female

In which university or college do you teach now?

For how many years have you taught English in total?

For how many years have you taught English in your current university or college?

Which degree programme are you teaching now? ☐ ADE ☐ BEd honours

Think of **English classes you teach**.

Here is a way to describe your experiences.

interesting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	boring	This means that you found the work fairly boring , but the material was very relevant to your students and was neither easy nor difficult
relevant	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	irrelevant	
easy	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	difficult	

Use the same method in questions (1).

- (1) Think of your expectations about your **Functional English classes this year**

Tick one box on each line

The course will develop critical thinking skills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The course will not develop critical thinking skills
The students will lack motivation for this course	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The students will possess motivation for this course
There will be useful online resources for students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	There will not be useful online resources for students
The course design will encourage quality teaching	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The course design will not affect quality teaching
This course is not strongly student-centered	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	This course is strongly student-centered
The course involves much activity-based learning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The course involves little activity-based learning
This course does not focus more on thinking skills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	This course focuses more on thinking skills
It will be difficult to assess the important outcomes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	It will be easy to assess the important outcomes
There will be a lack of suitable teaching materials	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	There will be adequate suitable teaching materials

- (2) Thinking of the reasons for **teaching Functional English**.

Tick all the reasons that you consider to be true

<input type="checkbox"/> It is an important subject in many disciplines	<input type="checkbox"/> It is an easy language
<input type="checkbox"/> It is the main language, in Pakistan, for official communication	<input type="checkbox"/> Most books are in English
<input type="checkbox"/> It is important for study at university for many careers	<input type="checkbox"/> This course opens doors to good jobs
<input type="checkbox"/> I think this course will help the students to understand the world	<input type="checkbox"/> Students enjoy learning a second language
<input type="checkbox"/> I feel I am educating my students in language skills	<input type="checkbox"/> It helps students to think critically

- (3) Think of **the course guidelines for the Functional English** course you are to teach

Tick one box on each line.

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
(a) The course looks interesting to teach	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(b) ICT would help me to teach better	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(c) I should like to use group work materials regularly with my students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(d) I was offered good training to help me deliver this course	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(e) In this course, I wish to try to challenge students to think and to question	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(f) I should have liked more opportunity to encourage my students to think	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(g) Students can pass the course without being involved in critical thinking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(h) I want to encourage my students to question and challenge	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(i) I am confident in achieving all the course outcomes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(j) I shall be encouraging my students to use English	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- (4) In two sentences, write down any **other benefits** you hope that your course in Functional English will give to your students.

The course will help my students to

- (5) You have now seen the course guidelines for Functional English.
Write down **ONE THING** you would like to introduce to the course when you teach it.

I should like to introduce

Thank you

Teaching English as a Second Language

How you see your Teaching Experiences

*This survey seeks to find your views about your experiences in teaching English
It is a research study being conducted in the University of Glasgow, Scotland
The outcomes may guide plans for future developments
Your answers will be treated with total confidentiality*

Gender: ☐ Male ☐ Female

In which university or college do you teach now?

For how many years have you taught English in total?

For how many years have you taught English in your current university or college?

Which degree programme are you teaching now? ☐ ADE ☐ BEd honours

Think of **English classes you teach**.

Here is a way to describe your experiences.

<div style="display: flex; justify-content: space-between;"> <div> interesting <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> boring relevant <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> irrelevant easy <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> difficult </div> <div style="width: 40%;"> <p>This means that you found the work fairly boring, but the material was very relevant to your students and was neither easy nor difficult</p> </div> </div>
--

Use the same method in questions (1).

(1) Think of your **Functional English classes this year**

Tick one box on each line

The course will develop critical thinking skills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The course will not develop critical thinking skills
The students will lack motivation for this course	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The students will possess motivation for this course
There will be useful online resources for students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	There will not be useful online resources for students
The course design will encourage quality teaching	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The course design will not affect quality teaching
This course is not strongly student-centered	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	This course is strongly student-centered
The course involves much activity-based learning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The course involves little activity-based learning
This course does not focus more on thinking skills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	This course focuses more on thinking skills
It will be difficult to assess the important outcomes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	It will be easy to assess the important outcomes
There will be a lack of suitable teaching materials	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	There will be adequate suitable teaching materials

(2) Thinking of the reasons for **teaching Functional English**.

Tick all the reasons that you consider to be true

- | | |
|---|--|
| <input type="checkbox"/> It is an important subject in many disciplines | <input type="checkbox"/> It is an easy language |
| <input type="checkbox"/> It is the main language, in Pakistan, for official communication | <input type="checkbox"/> Most books are in English |
| <input type="checkbox"/> It is important for study at university for many careers | <input type="checkbox"/> This course opens doors to good jobs |
| <input type="checkbox"/> I think this course will help the students to understand the world | <input type="checkbox"/> Students enjoy learning a second language |
| <input type="checkbox"/> I feel I am educating my students in language skills | <input type="checkbox"/> It helps students to think critically |

(3) Think of **the course guidelines for the Functional English** course you have taught

Tick one box on each line.

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
(a) The course looks interesting to teach	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(b) ICT would help me to teach better	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(c) I should like to use group work materials regularly with my students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(d) I was offered good training to help me deliver this course	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(e) In this course, I wish to try to challenge students to think and to question	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(f) I should have liked more opportunity to encourage my students to think	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(g) Students can pass the course without being involved in critical thinking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(h) I want to encourage my students to question and challenge	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(i) I am confident in achieving all the course outcomes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(j) I shall be encouraging my students to use English	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- (4) In two sentences, write down any **other benefits** you consider that your course in functional English gave to your students.

The course will help my students to

- (5) You have taught the English course this semester.
Write down **ONE THING** you would like to introduce to the course when you teach it again.

I should like to introduce

Thank you

Data from Student Questionnaire

Questionnaire structure	
Question	Areas of Exploration
1	How the course altered the way English was perceived and applied in daily life
2	An evaluation of the Functional English course when compared to Intermediate course
3	How the courses altered any preferred ways of learning
4	Comparison of perceptions of Functional English course and Intermediate course
5	Did the place of critical thinking, as an aim, change as a result of undertaking the Functional English course?
6	Had the course, with its emphasis on critical thinking, modified students perceptions of their skills?
7	Two open-ended questions
Questionnaire sample 140 - same sample measured before and after Questionnaire purpose Designed to look at any differences in perceptions before and after completing the Functional English course. Questionnaire Analysis Each item is considered in turn. Data obtained are shown as the percentages to the nearest whole number. The responses before and after the Functional English course are compared using chi-square as a contingency test	

Question 1 English in everyday life

Introductory question designed to familiarise the students with the format of the questions.

N = 140		Positive		%		Negative	
I use English frequently at home	Total Before	1	16	34	27	21	
	Total After	5	10	46	28	11	
I meet people who speak English	Total Before	19	36	24	14	6	
	Total After	23	26	34	14	3	
I watch movies in English frequently	Total Before	19	17	19	19	27	
	Total After	14	24	23	16	24	
I often read books in English	Total Before	9	17	33	27	14	
	Total After	8	29	20	31	11	
I use English with my friends	Total Before	13	30	28	16	13	
	Total After	8	23	36	19	14	
I often listen to songs in English	Total Before	19	16	20	16	29	
	Total After	11	20	21	21	26	

Question 2 Intermediate and Functional English Courses

When used before the Functional English course, the question invited the students to look back at their intermediate course. Two items (*I was encouraged to think and question; the course gave me scope for thinking*) were embedded among general questions to explore aspects of thinking.

N = 140		Positive		%		Negative	
I enjoyed the classes	Total Before	41	30	20	4	4	
	Total After	56	32	8	0	4	
I found the work demanding	Total Before	34	23	23	14	7	
	Total After	49	34	12	3	2	
The work was relevant to my other studies	Total Before	19	20	32	16	13	
	Total After	34	15	16	12	23	
I was encouraged to think and question	Total Before	24	27	31	14	4	
	Total After	62	26	8	1	1	
I was encouraged to speak in English	Total Before	26	41	19	4	10	
	Total After	63	19	12	4	2	
I feel confident in communicating in English	Total Before	16	26	21	23	14	
	Total After	15	36	28	14	8	
I liked the way the course was taught to me	Total Before	23	31	22	14	9	
	Total After	57	24	11	3	4	
The course gave me scope for thinking	Total Before	15	7	30	29	19	
	Total After	35	21	6	14	24	
I had access to online materials	Total Before	19	9	19	9	44	
	Total After	57	14	11	6	12	

Question 3 Preferred Way of Learning

The purpose of the question was to see if their preferred ways of learning had altered at all after completing the Functional English Course, given the very large change of emphasis in this course compared to previous courses undertaken.

N = 140		Positive	%	Negative		
I prefer to learn by reading books	Total Before	34	52	11	2	0
	Total After	33	44	19	2	2
I have a good memory	Total Before	25	52	16	6	1
	Total After	24	46	27	3	1
I like to understand things rather than simply memorise them	Total Before	61	24	8	6	1
	Total After	62	31	4	1	1
I find I rely heavily on clear explanations from the teacher	Total Before	20	49	14	18	0
	Total After	9	19	28	29	16
I learn best when I do things for myself	Total Before	69	22	9	0	-
	Total After	66	26	6	1	-
I often see ideas in terms of mental pictures	Total Before	41	49	7	3	0
	Total After	52	34	9	4	1
I am sure I shall pass my examinations	Total Before	74	23	4	0	0
	Total After	76	18	4	1	1
I like using online resources for learning English	Total Before	26	34	21	8	10
	Total After	49	34	9	7	1

Question 4 Intermediate and Functional English Courses

This question overlaps with question 2 but employs a different format, thus offering complementary insights.

N = 140		Positive		%		Negative
I found the course interesting	Total Before	22	53	21	2	2
	Total After	46	39	11	0	5
ICT would help me to learn better	Total Before	46	41	11	2	1
	Total After	56	33	9	1	1
I feel my language skills have been enhanced	Total Before	16	49	24	8	3
	Total After	41	41	12	2	3
I prefer to learn the facts and then be tested on what I remember	Total Before	36	31	20	11	1
	Total After	73	21	4	2	1
In order to pass my examinations, I need to study just what the teacher tells me	Total Before	8	38	14	25	15
	Total After	15	31	26	19	9
The course has helped me to understand the structure of language	Total Before	21	44	19	13	3
	Total After	31	55	11	0	2
The lecture course challenged me to think and to question	Total Before	22	46	21	11	1
	Total After	50	34	9	2	4
All one has to do in this course is to memorise things	Total Before	12	37	23	19	9
	Total After	31	33	15	13	9
I have improved my listening and reading skills in English more than I expected	Total Before	16	41	19	22	3
	Total After	22	47	21	4	6
The course has helped me to analyse the way language is constructed	Total Before	13	51	25	6	5
	Total After	23	56	16	4	1
In exams, I like questions which give me the scope to go beyond what is taught and show my ability to think	Total Before	45	36	10	7	1
	Total After	53	33	10	4	1

Question 5 Reasons for Studying English as a Second Language

Given ten possible reasons for studying English as a second language, students were asked to tick all the reasons true for them.

Reasons	% Before	% After
It is an important subject in my main discipline	79	80
It is the main language, in Pakistan, for official communication	65	67
A functional English course will help me in my professional career	91	96
I think this course will help me to understand the world	61	64
I am doing what parents encouraged me to do	21	25
It is an easy language	11	14
Most books are in English	70	80
This course helps me to think critically	48	65
I enjoy learning English	52	61
I think my course will lead to good jobs	85	86

Question 6 Rating of Abilities

The students were asked to rate themselves on eight skills related to the learning of English.

N = 140		Excellent	Good	Fair	Poor
Understand instructions in English	Before	6	65	26	3
	After	19	61	19	1
Make a presentation in your class in English	Before	4	30	54	12
	After	8	38	46	9
Take part in discussions in English	Before	5	33	52	10
	After	7	59	29	6
Write a formal letter in English	Before	14	45	39	3
	After	19	61	19	1
Read text in English with good understanding	Before	19	50	26	5
	After	27	55	18	0
Express your feelings in English	Before	10	36	45	9
	After	8	46	44	2
Narrate a story, using a picture	Before	11	38	36	15
	After	15	33	43	9
Punctuate a text in English	Before	11	44	36	10
	After	24	34	36	6

Questions 7 and 8 Open-ended Questions

- (7) Write down any **other benefits** you gained from your **Intermediate English** course (two sentences only)

My course in English has helped me to.....

- (8) Imagine you have been appointed to teach your **Intermediate English** course.
Write down **ONE THING** you would like to introduce to the course.

I should like to introduce.....

Designed to allow the students to indicate important features of such courses and to indicate what features they wanted or wanted to be developed further, the questions offer an insight into the place of thinking or, specifically, critical thinking. The student responses were analysed by identifying the key words and phrases they used and comparing the frequencies of the ideas they mentioned.

In question 7, over 850 phrases used after compared to about 260 before when listing benefits.

In question 8, nearly 500 phrases for what they wanted compared to less than 140 before.

Phrases Used	Before		After	
	<i>Appreciated features</i>	<i>Desired features</i>	<i>Appreciated features</i>	<i>Desired features</i>
Basic skills (reading, writing, listening, speaking)	99	11	75	3
Grammar and vocabulary	15	5	1	2
Language skills (unspecified)	10	0	29	0
Thinking skills	1	0	56	4
Activities, involvement, participation	0	5	5	44
Understanding	7	0	11	2
Words like: improved, enhanced, good, developed	10	0	97	0
Confidence	4	0	12	0
Group work, discussion	1	9	5	92

Appendix 3

Sample Transcripts:

Student Focus Group Discussions

Teacher Interviews

Class observations

Semi-structured Focus Group (Phase-I and Phase-II)

Time predicted: 30-40 minutes

Group Size: 4-5 students

(1) Introduction

- (f) Background demographics (name, previous college, etc)

(2) Background

- (a) What is your previous experience in learning courses in English?
- (b) What do you think of learning English as a second language?
- (c) In your view, why is it important to learning English?
- (d) Do you think that learning language is different than learning of other subjects? If so, how?

(3) Purpose and Goals

- (a) How do you see the purpose of learning in the functional English course?
- (b) Do you expect to achieve this purpose?
- (c) What goals would you like to see?
- (d) What do you expect from a Functional English course?

(4) Critical Thinking

- (a) What are the thinking processes involved in learning?
- (b) Think of critical thinking (CT):
 - i. How do you understand CT?
 - ii. How can you teach CT?
 - iii. How do students apply CT skills?
 - iv. How can we evaluate the achievement of CT skills?
 - v. What might hinder the development of CT skills in students?
- (c) As a student, what do you see your teacher's role or contribution towards the development of students' critical thinking? Please support your answer.

(5) Barriers and Facilitators

- (a) Do you think English is a difficult language to learn? If yes, what difficulties you face in learning English?
- (b) What are the most enjoyable aspects of learning English?
- (c) Are you aware of any gender differences in the student learning approaches?
- (d) Do you think your previous educational backgrounds affect your learning?
- (e) What helps you to learn English better?
- (f) What hinders your learning?

(6) Policy, Curriculum and Assessment

- (a) Do you find the policy in Higher Education towards learning English as second language helpful? Please support your answer.
- (b) In what ways do the examination criteria help to serve the purpose of your English course?
- (c) In what ways does the curriculum help to serve the purpose of your English course?

(7) The Practicalities

- (a) In what ways do the resources available to you affect the way you learn?
- (b) Where do you see yourself after completion of this course in terms of your learning and career?
- (c) What is the most important thing you gained from this Functional English course?

Semi-structured Interview Schedule for Teachers
(Phase-I and Phase-II)
Time predicted: 30-40 minutes

(1) Introduction

- (a) Background demographics (name, qualifications, length of service, career so far, etc)

(2) Background

- (a) What is your previous experience in teaching courses in English?
 (b) What do you think of teaching English as a second language?
 (c) In your view, why is it important to teach English?
 (d) Do you think teaching language is different from teaching other subjects? If so, how?

(3) Purpose and Goals

- (g) How do you see the purpose of teaching in the Functional English course?
 (h) Do you expect to achieve this purpose?
 (i) What goals would you like to see?
 (j) What do you think is the goal of students in taking this course?
 (k) What do you expect from a Functional English course?

(4) Critical Thinking

- (a) What are the thinking processes involved in learning?
 (b) Think of critical thinking (CT):
 i. How do you understand CT?
 ii. How can you teach CT?
 iii. How do students apply CT skills?
 iv. How can we evaluate the achievement of CT skills?
 v. What might hinder the development of CT skills in students?
 (c) As a teacher, what do you see as your role or contribution towards the development of students' critical thinking? Please support your answer.

(5) Barriers and Facilitators

- (a) Do you think English is a difficult language to teach? If yes, what difficulties do you face in teaching English?
 (b) What are the most enjoyable aspects of teaching English?
 (c) Are you aware of any gender differences in the student learning approaches?
 (d) Do students' previous educational backgrounds affect their learning?
 (e) In your view, what helps students to learn English better?
 (f) In your view, what hinders students' learning?

(6) Policy, Curriculum and Assessment

- (a) Do you find the policy in Higher Education towards learning English as second language helpful? Please support your answer.
 (b) In what ways do the examination criteria help to serve the purpose of your English course?
 (c) In what ways does the curriculum help to serve the purpose of your English course?

(7) The Practicalities

- (a) How do you find the overall workload for yourself in teaching this course?
 (b) In what ways do the resources available to you affect the way you teach?
 (c) Where do you see your students after completion of this course in terms of their learning and career?

Unstructured Observations Schedule

University or College: Date of visit:.....

Class: Time:

Number of students:

Development of Critical Thinking Skills

1. Content
2. Organisation of the lesson(s)
3. Interaction (teacher and students)
4. Link between English Course and development of critical thinking skills

(Sample)
Unstructured Observations Schedule

Class: ADE

Time: 09:30 to 10.30am

Number of students: 40

1. CONTENT:

Topic: Designing Instructional Manual

Objectives/ Intended Learning Outcomes (ILOs):

At the end of this session students will be able to:

1. Explore instruction manuals of different products.
2. Comparing instruction manuals for developing critical understanding of essential of a manual.
3. Designing an instruction manual for a new student enrolling in a college.

Instructional Content: Phrases used for instructions, Vocabulary,

Instructional Activity: Making requests and enquiries.

Material: marker, white board,

Strategies:

- Pair share
- Group Work

2. Organisation of the lesson(s)

- Brainstorming activity
- Teacher asked students if they know what are instructions?
- Have you ever noticed / observed any instructions in class room, traffic, map , driving or of any product?
- Teacher encouraged all the students to respond.
- Teacher engaged students in thinking.
- Teacher successfully communicated ILOs (Intended Learning Outcomes) verbally.
- This brainstorm session took 5 minutes.

PRESENTATION

ACTIVITY 1: Pair Share/Group

- Teacher asked all the students to think of any instructions they have ever come across and then share their ideas with friend (pair share).
- Teacher then divided the class into groups of 5 and asked students to share their knowledge of instructions they have seen or observed.
- In each group students were asked to find a product currently available with them with instructions and read those instructions in group.
- Each group came up with very interesting products like sunblock, moisturiser, eye drops, tablets, BP operates manual etc.
- They read the instructions in groups to get them selves familiarised with the language structure of instructions.
- One girl from each group read out the instructions to the class.
- Students were asked to listen each group's presentation carefully and notice/observe how one set of instructions is different from other types of writing.
- It took 15 minutes to complete this activity.

ACTIVITY 2: Group Activity

- Teacher draw a mobile phone on the white board and asked students to think of instructions for using this mobile
- Students were asked to discuss in groups and then come up with instructions from each group.
- 5 minutes were given for this thinking.
- A student from each group one by one shared an instruction with the class and teacher started noted down all the instructions on the white board.

- Teacher also kept encouraging all the students to speak up
- Teacher drew attention to the significance of sequencing and the use of words that draw attention to sequence such as *first*, *then*, *next*, and *after*.
- By the end of this activity a very comprehensive set of instruction was structured.
- It took 10 minutes to complete this activity.

ACTIVITY 3: Group Activity

- Students were regrouped for the next activity and were asked to think of scenario where they have to give some instructions to a new student who recently joined college.
- They were asked to share their ideas in groups and then note down the instructions.
- They should think first about what information to include and then about how to present it.
- Teacher kept visiting all the groups, encouraging and suggesting them instructions and students were seeking help at times from the teacher.
- Later two girls from each group step forward for the role-play where one has to give instructions to the other student (assuming the other a new student who recently joined college).
- Teacher appreciated the efforts of all groups and asked them add few more instructions.
- This 20 min activity was thoroughly enjoyed by all the students.
- Teacher delivered a mini lecture of 5min on what makes it difficult to follow instructions and what makes an instructional guide functional and comprehensible.
- At the end of this activity, for their home assignment, teacher asked students to find an instructional manual at home and design another manual for any product they like and compare the both and write down the differences and add it to their portfolio.

Interaction (Teacher and Students):

- Excellent Teacher and Students interaction was witnessed.
- Teacher has been encouraging students to participate in each and every activity and make sure that every student should take part in the activities.
- Teacher was very friendly and welcomed the responses of students and suggested improvements as well.
- The group activity provided students with the opportunity to think and share their ideas with each other.
- The whole class fully participated in group activities and sharing their ideas with each other and responded well to teacher's questions.

3. Link between English Course and development of critical thinking skills:

- All the activities involved a good deal of thinking on part of students.
- Students were critically examining and choosing the most appropriate ideas of each other for designing instructions.
- For students the most enjoyable aspect of activity 3 was to create something new from their real life experiences. This gave them opportunity to bring in their actual life into their learning.
- This class provided students with a rich experience of thinking critically and communicating creative ideas in English.
- The different activities carried out in class made students relate their real life experiences with their current knowledge and provide them opportunity to think, analyse, and come up with creative ideas.
- The active involvement of students in different activities made it a very alive class where students were enthusiastically sharing their ideas in pair and groups. The use of critical thinking on part of students was very much evident from the way they were responding during activities.
- During different presentations students observed the mistakes of the presenter in their verbal expressions being corrected by the teacher and this helped them not to repeat the same during their turn.
- During the group activities students had good practice to analyse and evaluate different ideas shared by group members and choose the best ideas to present before the class.

1. The teacher provided the time management plan and successfully followed it.
2. Hand outs were neither mentioned nor provided in the class.
3. Medium of instruction throughout the class L1.
4. Teacher was very active and made sure that every student must participate in every activity.

Sample Focus Group Transcript (Phase-I)

Participants: 07

Introduction:

My name is Shaista and I have met you all before. Today I am here for our Focus Group discussion and I am very thankful to all of you for being part of this focus group and helping me in my research. I would like you to introduce yourself one by one. You can talk to me in English, Urdu or Hindko.... whatever language you are comfortable with. Now please introduce yourself.

Questions :

2a. What is your previous experience in learning courses in English?

Participant 5: That was very good and especially in F.Sc. (*What do you mean by good? could you elaborate it please.*) Our teachers were very hard working that's why I found them better than my teachers in Metric. (*Could you explain hardworking a bit more please.*) They gave us more time and they try to engage us in activities and I learnt myself. I used to read articles in English. I personally used to take interest in learning English and reading different articles.

Participant 3: Tenses are the base of learning. (**Tenses mean?**) I mean structure of English, without that we cannot speak English properly. We were not taught the structure of English. Teachers used to follow books only and make us to memorise questions answers only and we reproduce them in examinations. I did English language course on my own and learnt English. I started reading English newspapers. I was personally interested in learning English.

Participant 4: I did DAE (Diploma for Associate Engineering) and studied English in 1st semester only. It included basic language structure of tenses, grammar etc. I studied the same in Matric but I learnt a lot in 1st year. I used to read storybooks in English and that helped me in improving my English.

Participant 1: Till my Metric, our teachers used to focus on tenses only like past, present and future tense and did not explain in details. We couldn't understand tenses at all. In F.A course was again focuses on tenses, parts of speech, active passive etc. same things were repeated. Then I did English language but I couldn't practice (**what do you mean by practice?**) I couldn't find a company to speak with. I did my FA as a private candidate so I didn't get chance to speak with class fellows in class. Still now when I am in the class most of the students are reluctant and feel shy in speaking English.

Participant 2: I did my Metric from Hazara public school and in class 8th, 9th and 10th we were taught English by same teacher and she taught us very well but all our learning was confined only to the class room. We never got opportunity to get engaged into activities outside the class to practice what we had been taught. we used to be taught one day in the class, learn it by heart and reproduce the same before the teacher next day. Emphasis was on memorisation. No activities were arranged for us.

Participant 6: Our teacher did hard work and taught us how to make sentences and how to use grammar & tenses but we couldn't learn better because our concepts were not clear. Our teachers in F.Sc were good but as our base was weak so we couldn't understand English well.

Participant 7: We have been taught only to pass the examination. Basic grammar and tenses was taught but medium of instruction was Urdu so it didn't help me to learn English better.

2b. What do you think of learning English as a second language?

and

2c. In your view, why is it important to learning English?

Participant 4: It has become necessary and we cannot move forward in life. Keeping in view our future prospective we have to learn it.

Participant 5: To me it is very necessary because it is international language.

Participant 3: English is very important in every walk of life and in education field especially English is considered as a must. All tests and interviews are conducted in English. It has become our official language. Urdu and mother tongue is not being considered as important as English. You cannot be successful in life without English.

Participant 1: Well I don't think English is important for us or for the development of our country. If we see China, Chinese people say that we have our own language and they don't prefer English and they are ahead of America in development but the environment we have in Pakistan there we need to learn English to run our lives but i don't think it necessary for development.

Participant 7: Language is a tool with which we communicate with other people and nationalities and use it when we visit other countries. It is our official language too.

Participant 2: Our national language is Urdu but we have to learn English. it has become a fashion to learn English. We start learning English from KG (kindergarten) . All the tests and interviews for jobs are conducted in English.

* We all agree that because all books are in English that's why we learn English but if we are given choice we shall prefer to learn Urdu.

2d : Do you think that learning language is different than learning of other subjects? If so, how?

Participant 2: It is not different

Participant 4: We cannot learn any language only by teaching. they should make us learn how to learn English . We have been taught English like other subjects.

Participant 3: To learn our mother tongue like hindko and pushto etc we don't need to learn the structure of mother tongue. Yes it is different from other subjects.

Participant 1: It wasn't different, had been taught like other subjects. we have to master in language as I think it is an art to speak in English.

Participant 5: Yes its different.

Participant 6: yes it is different. I have found it different from other subjects.

Participant 7: No to me it was not different. we have been taught all the subjects in the same way.

3a: How do you see the purpose of learning in the functional English course?

Participant 1: We have to teach English to our coming generations to make them understand ,learn and speak so that they could use it in their professional and practical life. I see this as the most important purpose of Functional English.

Participant 7: we have to become a teacher in future so we should learn language structure, skills so that we could teach the same in future.

Participant 4: The purpose of this course is to be master in English Language skills because unless we understand it we can not teach it . We are being trained to be a good teacher.

Participant 3: All basic things are being taught that is tenses, prepositions, parts of speech and other things like that. we are being taught functional English so our language skills should be enhanced and learn English better. Because if we learn it better only then we would be able to teach.

Participant 6: We are being trained in language skills.

3b: Do you expect to achieve this purpose?

Participant 1: Yes

Participant 3: Yes but we have to make some extra personal effort.

Participant 7:

3c: What goals would you like to see?

&

3d: What do you expect from a Functional English course?

Participant 1: We will become good teachers with enhanced language skills.

Participant 2: I agree with No.1

Participant 3: It will guide us in our teaching profession and our language skills will be enhanced.

Participant 4: Improved language skills.

Participant 6: Enhanced language skills with better job opportunities and better understanding of language.

Participant 7: My language knowledge will be enhanced and I ll become a good teacher.

4a: What are the thinking processes involved in learning?

All said we don't have any idea.

4b: How do you understand CT?

Participant 2: I don't have any idea about critical thinking.

Participant 3: Whenever we come across a difficult word in a text we think about its meaning and then we consult our teacher or dictionary for its meaning and we think a lot. So I think this is how thinking is involved in learning.

Participant 4: If we encounter any sentence or statement which is not in accordance to what we have been taught then we think and question and ask our teacher if it is right or wrong.

Participant 1: Critical thinking is definitely there in learning. For example when a teacher is teaching then the students do not understand him/her and say that this teacher is not teaching with good mood or he is not explaining things properly so we don't understand and get confused.

4 b -ii , iii, iv , v

All participants had no idea about these questions.

4c:As a student, what do you see your teacher's role or contribution towards the development of students' critical thinking? Please support your answer.

Participant 7: Yes because it is activity-based course and without a good teacher no learning is possible.

Participant 5: Our teacher gives us different tasks and makes us think during that task.

Participant 4: In group activities we get opportunity to think and competitions among groups also encourage thinking like making family trees and other tasks like putting missing words in the sentence or blanks and then this whole practice involve Critical Thinking.

Participant 6: We have never heard this word.

Participant 7: Yes we practice CT skills but don't realised.

5a:Do you think English is a difficult language to learn? If yes, what difficulties you face in learning English?

Participant 1: It is not difficult but we need to be consistent and work hard to learn it.

Participant 2: Not difficult but we need efforts to learn it.

Participant 3: If we do hard work we can do it. If we don't give enough time then it is difficult.

Participant 4: It is not difficult but depends a lot on learning and teaching environment.

Participant 5: Not difficult.

Participant 6: It is easy but we need to be focused.

Participant 7: It is easy but grammar is a bit difficult to understand.

5b: What are the most enjoyable aspects of learning English?

Participant 3: I enjoy reading stories and when we are being taught tenses.

Participant 1: I like to converse in English in class.

Participant 5: I like conversation in English and reading.

Participant 6: I enjoy passage reading

5c: Are you aware of any gender differences in the student learning approaches?

Participant 3 and 6: Girls are good learner

Participant 4,2,5,7: Boys

5d: Do you think your previous educational backgrounds affect your learning?

Participant 1: It helped us because we had some idea.

Participant 2: It was helpful, that's why I am doing well in this class. because we had know how of the basics of English

Participant 4,6,7: It was very helpful.

5e:What helps you to learn English better?

Participant 3: Group work helped a lot.

Participant 4: Activities and group discussions helped me.

Participant 5: Group activities

Participant 6: Activities helped me a lot in learning English.

Participant 1: Methodology of teacher and group activities helped me a lot in learning better English.

5f:What hinders your learning?

Participant 3: Grammar is not being taught well especially methodology of teaching grammar is not very good.

Participant 2: We don't practice what we learn in class.

Participant 1: Vocabulary hinders. We don't know how to use different words when problem is faced by all of us.

6a: Do you find the policy in Higher Education towards learning English as second language helpful? Please support your answer.

Participant 1: It includes activities, new courses , most subjects are in English, activities are in English, reading and writing is in English.

All agreed that its a shift from teacher centred to student centred and they all found it very helpful.

6b: In what ways do the examination criteria help to serve the purpose of your English course?

Participant 2:we used to memorise and rote learning so I don't think earlier examination was helpful.

Participant 1: we have 2 types of questions in exam, which helps both the students who memorise and those who really learn things. Objective type questions can be answered only by those who really understand and learn things and in other types of questions rote learners also go through the theoretical ones.

6c: In what ways does the curriculum help to serve the purpose of your English course?

All responded that course is excellent because it is activity based and make us think.

7a: In what ways do the resources available to you affect the way you learn?

We have Internet facility, library and multimedia available and these things help a lot because we search different information through Internet.

7b: Where do you see yourself after completion of this course in terms of your learning and career?

Participant 1: I see myself as a good and effective teacher with enhanced learning in all respect.

Participant 2: Good learning and i shall introduce different activities which I have experienced.

Participant 3: Language skills shall be enhanced and would able to speak in English.

Thank you very much

Sample Focus Group Transcript (Phase-II)

Participants: 07

Introduction:

My name is Shaista and I have met you all before. Today I am here for our Focus Group discussion and I am very thankful to all of you for being part of this focus group and helping me in my research. I would like you to introduce yourself one by one. You can talk to me in English, Urdu or Hindko.... whatever language you are comfortable with. Now please introduce yourself.

Questions

How different did you find this learning experience of Functional English from your previous exp.?

Participant 1: It was altogether a new experience, very different from our previous one. The most important thing was that there was no textbook and we enjoyed a lot.

Participant 5: As I mentioned before that my previous learning experience was also good but here we experienced new methodology of teaching. We learnt through activities which was a new thing for us

Participant 4: It was learning by doing and when we do something on our own we never forget whatever we learn through that.

Participant 3: What I like the most is that here learning is by doing not by memorisation which we used to do till our intermediate level.

Participant 7: Previously we used to study only to pass the examinations but here we learnt in real sense and our language skills have been improved.

Participant 2: what I like the most about the activities was that they were not arranged for the sake of activities but these activities made us think.

All said yes thats true.

Now that you have finished this FE course so what do you think of English as a second language?

Participant 4: It is unavoidable to learn English because it's a compulsory subject and we have to learn it.

Participant 3: I would like to add that not only its a compulsory subject ..our medium of instruction is also English.

Participant 7: when we were asked to search material from internet, There I realised that no matter whatever is the subject ...the information is available in English.

Participant 5: I have already said this and I still believe that its a must for communication, World has become a global village now and to communicate internationally its importance can not be denied.

Participant 2: keeping in view our future scenario I believe that English is very important ...for jobs, interview, every walk of life. we are future teachers so unless and until we don't learn English well we will never be able to good teacher.

Do you think learning of FE was different from other subjects?

Yes ...indeed it is different.... all said in one voice

Participant 7: as far as my previous experience is concerned I didn't find it different from learning of other subjects but here in FE class I felt the difference. It was more focused on skills and not conveying information only like in other subjects.

Participant 5: yes it is different for me earlier too but now the difference is very obvious, our language skills are being focused and improved.

Participant 4: the difference that I have noticed is that language has been taught through practice not only instructions.

Participant 1: in my previous experience learning language was just the same like learning other subjects, teacher used to deliver lecture, or read from text book and we were given notes to memorise and that's all for an English class. But here in FE class I have realised that how different it is to learn a language. We were engaged in activities, we were asked to think and question. Through these activities our language skills were being improved.

Participant 6: another difference, other then what have been mentioned by my friends, is that grammar was not taught as a separate entity rather it was integrated with all language skills and we learnt without realising that we are learning grammar as well. Earlier there was a separate time allocated in the time table for grammar class.

Now that you have finished this FE course so what do you think what was the purpose of this course?

Participant 4: well i think the purpose of this course was to enhance our language skills and especially speaking skills.

Participant 1: As I have always believed that we can teach English only if we are master in it and only then we can teach it well. so to me the purpose of this course was to train us as good English teacher.

Participant 3: As this is a professional degree and we are future teachers so to me the purpose was to equip future teachers with best language skills.

Participant 7: Along with our teaching learning skills it has also improved our confidence and communication skills.

Participant 6: To me the purpose of this course was to prepare the future teachers with better language and thinking skills.

(You both mentioned that your thinking and speaking skill has been improved? how did you feel that your thinking is improved?)

Participant 1: During class activities we were assigned such tasks as to relate our learning with real life situations, come up with innovative and creative ideas and this involves a lot of thinking on the part of learner. That's how we felt that our thinking skills are improved. Brainstorming was another strategy, which made us think and recollect our previous knowledge.

Participant 3: Questioning / enquiry strategy was also helpful in making us think. Whether we were right or wrong in responding to those questions but at least it made us think.

Participant 6: We have never been discouraged in class rather teacher always appreciated us for participating in activities and this helped us gained confidence.

To what extent you think you achieved this purpose?

Participant 3: Whatever we were expecting the purpose of this course, we have achieved that to a great extent

All endorsed him

So what were the thinking processes involved in learning?

Participant 1: Before exposure to FE course we hardly had an idea that how thinking can be involved in learning.

Participant 3: as my friend has mentioned, I would further add that we have been practicing thinking skills unnoticeably or without realising that there was any thinking involved in learning.

Participant 5: though thinking has always been there but it was more like of casual thinking.

Participant 6: Activities were designed in such a way that they made us think deeply and then respond.

Participant 2: we were asked to analyse a piece of text, we were asked to compare & evaluate each other's work for example presentations etc.

Participant 4: this thinking practice not only helped in classroom learning but it also helped us to deal with different situations in our real life as well.

What is your understanding of Critical Thinking?

Participant 1: when you first asked this question we were really confused what it might be that's why we all replied we don't have any idea about this... after that when we started realising that that's what we always practice in class room during different activities and so on.

Participant 5: Yes my friend is right. Only after our first focus group we have noticed that we are very much involved in thinking. Whenever we are given a task like group discussions , role play, presentations etc. we think a lot and then perform. To me CT is to think logically and then come up with the best ideas we have thought of.

Participant 6: Our activities make us think creatively and I enjoyed this part of activities

Participant 2: As i have just said that when we are comparing , evaluating and analysing then all this involves critical thinking.

Participant 4: Keeping in view what my friends have just mentioned in nutshell i would like to describe it that to have a justification for our decisions and responses. we should think and then respond.... should not jump to conclusions.

How could we teach CT? Have you got chance to practice CT in your FE class?

Participant 1: It is evident from our own experience that CT can be taught through activities.

Participant 6: When the classroom is student centred then there are more opportunities to teach CT.

Participant 7: The questioning technique of teacher, which makes us think, plays very important role in teaching CT.

Participant 4: Group discussions were also very helpful in promoting our thinking skills.

How did you apply CT skills in the class?

No3: when we were given group tasks and discussions we used to think and discuss a lot before coming to some conclusion.

Participant 6: we were given enough time to think and respond and that's how we used to apply ct skills.

Participant 7: for role play when we were given to think of any real life character and perform then it involved a lot of thinking.

What hinders the development of CT skills?

Participant 2: when teacher is non-friendly and we have pressure due to his/her presence

Participant 4: when the focus of learning is on content rather than concept then its a big hindrance.

Participant 5: To me the biggest hindrance is when teacher does not give time to think and instead of making us think and respond teacher start conveying the information with us.

Participant 1: teacher can be a great facilitator but if not then a great hindrance . Teacher should pay equal attention to all the students because all the students do not share the same calibre of understanding .so mediocre students must be taken along with the rest of the class.

What do you think that what was the role of your teacher in developing your CT skills?

Participant 4: Nobody can deny the effective role of a teacher and in our case we are very lucky to have such a wonderful teacher who is more like a friend to us. he played major role in developing our thinking skills.

Participant 3: we were greatly encouraged by our teacher during different activities. he makes sure that every student in the class must be involved in activities.

Participant 1: Yes I agree with my friend that our teacher used to visit each and every group during group discussions and encourage us to participate.

Participant 4: Teacher always come to class well prepared with well-designed activities and lesson plans.

Participant 6: he always asks such questions, which make us, think a lot.

Do you think English is a difficult language to learn?

Participant 7: it was a very enjoyable experience for us; we didn't find it difficult to learn.

Participant 3: we were always very exited for this class.

Participant 5: learning experience of this class was very closed to our daily life; we have to relate our daily life experiences with our classroom learning.

Participant 4: it was not a bookish learning so i found this class very interesting. There was no textbook to be followed.

What did you enjoy the most in your FE class?

Participant 4: it was a student centred class and i like the active participation of students.

Participant 2: sharing of ideas in group discussion was something i enjoyed the most.

Participant 6: I feel more confident now in facing the audience and class during different activities and I enjoy this a lot.

Participant 7: I uses to enjoy brain storming session because we come across so many new and innovate ideas during such a session.

How did your previous Edu. background helped you in this class?

Participant 3: It provided us a base though a weak base yet it helped a lot.

Participant 5: due to our previous experience we were familiar with the language structure a bit which of course helped us.

No 4: our previous experience of learning was focused on reading and writing skill only , so i didn't help us in improving our listening and speaking

What helped you learn English better?

Participant 6: Teacher's encouragement

Participant 3: Group activities

Participant 2: Course guidelines were very clear and the handouts provided to us in the class were very helpful.

Participant 4: Critical thinking helped me to learn English.

What hinders your learning?

Participant 3:Teacher's unfriendly attitude

Are you happy with your examination criteria?

Participant 3: It discourages memorisation.

Participant 1: Marks distribution gives an opportunity to asses all language skills.

How did curriculum help you?

Participant 2: there are no textbooks in this course

Participant 4: It was to follow the course guidelines in FE as compared to our previous English courses where we have to finish our text book.

Participant 1: This course promotes thinking as it involves many activities.

Participant 6: we are given opportunities to think and learn, and we are not bound to text books.

What one thing you would like to mention that you have gained from this course.

Participant 1: speaking

Participant 2: confidence

Participant 3: presentations

Participant 4: reading skill

Participant 5: reading

Participant 6: speaking

Participant 7: thinking

Thank you very much

(Sample)

Interview Phase-I**Mr. Saboor² , Lecturer , University B****(1) Background demographics**

Mr. Saboor, MA English, MPhil in Education, 2 years job experience in university and in total 10 years experience of teaching English, currently teaching Functional Eng. to BEd Hons semester 1 for the first time.

(2a) What is your previous experience in teaching courses in English?

I have been teaching English to Intermediate students in Govt. Higher Secondary School with weak background so it was different experience to teach them functional English and due to examination system we can not go beyond certain limits in teaching. Students are weak and shy, have psychological problems due to economic constraints. Later I have been teaching English to Masters students as well but the best of experience I had was when I became a Master trainer and had been teaching English to Teachers and there we used functional English pedagogically and focus was not content. It is very important because our medium of instruction is English and it's our official language. In universities and ever where we go we need to talk in English. English must be taught as second language but my personal experience is that due to the examination system this is not happening whether it is second language or foreign language.

(2b) What do you think of teaching English as a second language?

It is very important because our medium of instruction is English and its our official language. In universities and everywhere we go we need to talk in English. English must be taught as second language but my personal experience is that due to the examination system this is not happening whether it is second language or foreign language.

(2c) In your view, why is it important to teach English?

It is very important because I think 99% of people do not get chance to go to England they don't need Eng for this matter, As it is medium of instruction in colleges and universities so to get education they have to learn English and for me this is the most important aspect of learning English.

(2d) Do you think teaching language is different from teaching other subjects? If so, how?

Definitely, I would like to elaborate that whenever we teach any subject we focus on the content for example if we teach chemistry we teach physical properties of chemical reactions which is something about content but when we teach English we need to train our teachers that content is only a tool basically these are skills and we need to teach them skills. We don't exhibit these skills. We as a teacher often not speak in english, we should make our students listen in English, it needs exposure. as far as writing is concerned we make them copy things and reading is associated ,reading comprehension and we need to focus on all these skills. teachers should train them in skills.

(3a) How do you see the purpose of teaching in the Functional English course?

It is different then teaching any other subject. There are functions to be performed in any language. We are making our students performing those functions in English using it as language through Functional

(3b) Do you expect to achieve this purpose?

we are lucky as far as teachers who are teaching at a university level. We can do it because we don't have annual examination system where the whole sole is focused on content, we have 30 marks with us and then we can come closer to formative assessment so we are more in a position to teach this functional English than a person who is teaching at metric and intermediate level so for me I would say Yes we are in a position. We can make them listen to English and we can give them reading comprehension sort of thing .we can give them creative writing kind of thing. I would say we are in a position to train them in all skills of language. These four skills are to me Functional English that all skills should be functional. We have got an advantage for being university teachers.

(3c) What goals would you like to see?

Basically the goals have to be making students capable of using English in terms of its function. What I could gather from your question is whether we can achieve these objectives or not. So we have to achieve these objectives. Being university teachers we have semester system and this semester system is better then annual system in terms of teaching functional English, I can not say this for English Literature I can not make comparison because literature has content base and you have to involve annual examination system

² All names used are pseudonyms

but here where we are teaching it as a Functional language in universities. In universities as you know we have different levels of assessments and we have marks in our hands. I can assign those marks for different activities for example 10 marks for spoken or creative writing and so on and that's how we can distribute 30 marks.

(3d) What do you think is the goal of students in taking this course?

I have mentioned it in my last response already. It is a compulsory course and all the students have to take it.

(3e) What do you expect from a Functional English course?

I guess I have replied this question when I talked about the purpose and goal of this course.

(4a) What are the thinking processes involved in learning?

(I don't know how I missed to ask this question from him)

(4b-1) How do you understand CT?

Whenever I think of Critical Thinking I recall a saying Bacon, it is not about CT but about study:

“Read not to contradict and confute nor to believe and take for granted.... but to weigh and consider.” whatever it is, knowledge or information and from whatever source we get information ,we should not be accepting it passively and we should not be rejecting it altogether .we should be in a position to weigh ,consider, analyse and evaluate it.As an independent learner we should reach conclusions by ourselves and these conclusions should be long lasting.

(4b-2) How can you teach CT?

By using those strategies, which make them independent learner, by involving them. I just say that my strategy as a teacher would be teaching through practice. When they question a lot ,they think a lot.

(4b-3) How do students apply CT skills?

There are few tools that we can use. We can use brain storming, discussions, questioning and different activities. We should know this thing that CT would be developed in students when we give them ample scope and ample time and then we should give them time to commit mistakes . We do not over rectify them. If we are always finding faults with them. Their notions might be mistaken but for me a mistaken notion of a student is first step of learning. Let them come up with their ideas and let them share their notions and welcome them and encourage them. we Pakistanis need CT more than others and we should make our students tolerant , accepting each other. CT would be developed when you give them opportunity and welcome their response. They would be understanding and be able to judge when they are mistaken and able to correct themselves. so we should give them chance and we as a teacher use it as a strategy.

(4b-4) How can we evaluate the achievement of CT skills?

I have just mentioned the ways we can evaluate the achievements of CT skills in students in detail.

(4b-5) What might hinder the development of CT skills in students?

As an educationist I can see many things in society and being society we do not nourish CT in our young ones but I would talk about examination system. It is based on content memory and memorisation and definitely rote memorisation. Learning through rote memory hinders CT. Our examination system and teachers' methodology supports rote memorisation.

(4c) As a teacher, what do you see as your role or contribution towards the development of students' critical thinking?

I think a teacher's role is great and especially in developing CT . Whatever the system is, let it be for example annual system even then we can develop critical thinking skills if we are good teacher. I have very high esteem about teaching. I think all the methodologies do not worth if they are not in the hands of a proper teacher and I think each and every method would work in the hands of an expert teacher. Sometimes we make our students to memorise things. I'll quote an example that some times we have to teach through lecture method, lecture method would allow much of CT but a good teacher can use lecture method for teaching CT. Why not to use a lot of questioning during lecture method and why not we should give our students time for discussion so a good teacher for me can really develop CT skills.

(5a) Do you think English is a difficult language to teach?

All languages are difficult to teach. Teaching language is different from teaching of any other subject.

To me there is one major issue and that is that we forget that we are teaching a language and not a subject.

(5b) What are the most enjoyable aspects of teaching English?

When I expose my students to different skills I enjoy those moments when due to my encouragement my students enjoy their mistakes. If they speak with mistaken English and enjoy it they feel encouraged and I think this is the way I should be doing it.

(5c) Are you aware of any gender differences in the student learning approaches?

I think boys are sharper than girls but girls in general are hardworking and studious.

(5d) Do students' previous educational backgrounds affect their learning?

Definitely Educational background affects their learning. For example students from government schools are far more different from those who are from Beacon House schools etc. in terms of their English language. Its like people who have never been exposed to language in comparison with those had every opportunity.

(5e) In your view, what helps students to learn English better?

Confidence.... confidence and self-engagement. If we make them or engage them in all different language skills. If somebody asks me who is affective English teacher as an observer i would say the one who engage students in different skills. Usually we teach through textbooks where have stories, drama and poetry. We can use all these contents for teaching language. We can use role-play in dramas where students get an opportunity of speaking and listening to each other. In Pakistani context we cannot provide them native (speakers) exposure.

(5f) In your view, what hinders students' learning?

Lack of confidence, examination system that promote rote-learning, lack of encouragement from teachers.

(6a) Do you find the policy in Higher Education towards learning English as second language helpful? Please support your answer.

In policy everywhere it would be written that we want teachers to use this but I don't find problems with policies I find problem in execution and implementation. Without training teachers, like 90% of teachers themselves are not fluent speakers then you cannot expect their students good speaker of English. Policy is something else and actual reality is something else.

(6b) In what ways do the examination criteria help to serve the purpose of your English course?

Once again I would say the same thing that it is written examination and we can check writing skill only and that too is not creative writing. So only one skill is being assessed and that one skill is based on memorisation. Definitely examination system has a lot to do.

(6c) In what ways does the curriculum help to serve the purpose of your English course?

As far as curriculum is concerned, it involves everything like content, objectives, methodology and examination system. Different curriculum will bring a huge change

(7a) How do you find the overall workload for yourself in teaching this course?

I am happy with my workload because being a university teacher we are not overburdened.

(7b) In what ways do the resources available to you affect the way you teach?

Definitely it affects. For example in terms of language teaching first step is listening exposure of native speakers and that can be provided by internet through different resources where native speakers are speaking and students listen to them. in university we have the best facilities available, however in terms of physical facilities our class rooms are small and we can not arrange group activities in class but there is hardly some space to move.

(7c) Where do you see your students after completion of this course in terms of their learning and career?

InshaAllah. I believe my students would be more confident in using English and they will be using English as functional English.

(Sample)

*Interview Phase-II***Mr. Saboor , Lecturer , University B.**

Thank you very much Mr. Saboor for your time. I know how busy you are these days. I am here again with the same questions. Now that you have finished teaching your course of Functional English I am sure you are in a better position to share with me your first ever teaching experience of Functional English like how did you find this course, what improvements have you noticed in your students and to what extent this course came up to ur expectations in terms of learning etc.

Earlier you mentioned that your best ever experience of teaching English was that of being Master trainer of English teachers. Could you elaborate it that what made that the best teaching experience for you?

It was my first ever experience to be exposed to teaching through activities and people (teachers) were ready to do it so it was easy for me to involve them in activities and it was first time that I practically got introduced to all those activities. Involving the students in different activities was the basic thing, which made this experience interesting for me.

So you experienced activity based learning first time with them?

Theoretically I knew about that but practically, yes , I was introduced to this for the first time. We are teaching in a system which is exam driven system, I was teaching to intermediate classes before that which is content based...a lot of content we have to cover before exams , sometimes we really want to involve our students in different activities like creative writing, reading comprehension but we can not that a lot because in government sector we lack facilities and more then 90% of time is consumed in covering the content and finishing text books so we are left with very short time to arrange some language activities for students.

You mentioned government sector, do you think private sector is not facing this problem?

In private sector things are better in comparison, because the number of students in a class are manageable and above all they have more working days than government schools and colleges. In government sector teachers and students enjoy longer vacations in summers and winters however private sector have their own schedules for vacations. So despite my strong desire I couldn't arrange activities for my intermediate students in college. That's why I enjoyed my Master trainer experience because it 12 days workshop I got an opportunity to practice what I really wanted to in terms of activities and I have witnessed amazing results. In the beginning of the workshop there were many teachers who were shy of speaking in English but by the end of the workshop I found them all very confident in speaking English and facing audience.

In our first interview when I asked you what do you think of teaching English as a second language you mentioned that you agree that it should be taught as second language but its your experience that unfortunately its not being happened due to examination system we have.... Would you share few more thoughts on it?

Our examination system focus on writing of content by students and there is not much of language skills of students are involved. Examinations are content based and they will never examine our language skills. Students memorise content and reproduce the same. That's why I said that examination are content driven and test only memory and writing skills.

You gave me a very comprehensive answer to this question that teaching language is different from teaching other subjects, would you like to add something on completion of this course now.

I ll again emphasise on this that content is only a tool and our teachers should realise it that we should take content as tool and teach language skills through this tool. Teaching English must be different from other subjects and assessment for English should also be different. Assessment must include listening and spoken skills .we must be introducing such assessment, which includes all the four basic skills of English language.

Apart from making students able to speak English, do you see any other purpose of teaching Functional English (FE)?

There are many other purposes of teaching FE, The world is a Global Village and to introduce our people to world then English language is a must to learn to communicate with world.

As you have almost completed FE course so do think that all your expectations, you had from this course, are fulfilled?

Well I am very happy with the improvements I have noticed in my students. I was expecting my students to do well in language skills and today my students can speak in English confidently and they can write creatively. I wanted them all to start speaking, reading and writing and understand what they listen to ...and I see remarkable improvement in them. On a scale of 1-10, where do you rate your students in terms of their

learning, thinking and anything else you like to mention? Well keeping in view their academic background, and that they are students of semester 1 I'll rate them more than 7 because its just the beginning. They were exposed to this activity based learning for the first time in their academic career so keeping this in view I am very satisfied with their progress so far.

You mentioned in your previous interview that students' psychological constraints affect their learning. What kind of psychological constraints you were referring to?

In terms of language the basic thing is confidence...at least for me its confidence, so for confidence, in terms of language learning, many factors are involved like general and domestic environment, their economic constraints availability of different facilities like TV, computer, internet etc (at homes I mean) and people with low economic backgrounds don't have these opportunities, facilities and exposure so obviously it affects their learning overall.

Could you please explain the distribution of marks for assessment? I mean is every teacher at liberty to allocate marks on his or her own or there is some set rule for it.

Well we have 100 marks in total for FE and 30% or you can say 30 marks are assigned for formative assessment. 55 mark for final term exam and 15 marks for mid term so 70% marks are for written exam. Being a language teacher I am very happy that I have these 30 marks in which I can assess their listening skill, speaking skill, class participation, their questioning answering. For example I can allocate 10 marks for class participation or listening comprehension etc. This semester system is better in terms of learning language because it gives scope to use these 30marks for different activities which make students keep their interest alive and learn better. Formative assessment is very helpful especially in teaching FE because formative assessment is on going assessment. It gives me chance to witness and evaluate the performance of each n every student I mean every skill of language skills including reading, speaking and listening and writing through students' presentations, assignments, their performance in the activities etc. So I am happy that I have these 30 marks where I can assess them well.

Have you noticed that there were any thinking processes involved in learning?

Definitely yes because learning is based on thinking. We should inculcate in students the love for learning and for that thinking is a must. How can we inculcate the love for learning in students? We should make them think if they don't think then they will blindly follow whatever they have been taught then you are not a learner at all. We should make them think on their own. They should know which knowledge they should make part of their memory. Your knowledge is shown from your personality and only that knowledge becomes part of your personality about which you have thought a lot and then accept it and make it permanent part of your memory.so when you come across any information and based on your own assessment and analysis you accept or reject that information that means you know how to think and what to think about. By the end of the day it's the learner who has to decide and if we can inculcate this ability of thinking in students then they are good learner but unless they are good thinker they cant be good learner. We should not take any information for granted and we should not reject it altogether, evaluation involves learning and a learner should be an evaluator. We must be able to think and we must be able to think in our own context and then decide.***

In response to my question that how do you understand critical thinking skills you said that “we should be in a position to weigh, consider, analyse and evaluate it” so in terms of students and learning how can you relate this with classroom learning?

Whatever fact we are teaching them in different subjects and scenario, we must be trying to produce thinking ability in them. We should not be making them blind followers of whatever they are being taught. Basically they should be able to question. We should not restrict them to any specific or one way of thinking.

How did your students applied CT skills in class?

Well I involved my students in activities, made them listen, read, write and speak during different activities and I was amazed by the their responses. They used to question and questioning is the first step of thinking. When I assign them a task like role play activity and give them time to prepare it they think and share their ideas with each other it means they are looking for the best to present and that's critical thinking to choose the best available options/ statements etc and then to present them. This practice involves analysis and evaluation, which of course is CT skill.

Could you share any particular activity where you observed students using their CT skills?

Everyday and in every activity I witness my students using critical thinking skills. If I have to quote one example for reference then when I assign the activity of role play and for that I divide the class in groups and give them a scenario or many a times they have to select a scenario for themselves they do a lot of discussion in groups, thinking of different ideas regarding assigning roles, then they make dialogues and then they select and reject ideas so this whole activity is full of thinking where everybody wants to give his/

her input and want to be heard. I encourage them to take part in activities and get rid of their shyness. And by the grace of Allah I remained very successful. As I mentioned in my previous interview that I enjoy when students enjoy their mistakes.

How do students enjoy their mistakes by the way? I have created such environment in my class that no body is hesitant to respond to any question that I ask because I always encourage them and don't make fun of them if they use any wrong phrase or expression and so does my rest of class. So all students enjoy if somebody uses wrong grammatical expression but they don't make respondent feel offended. So there is a very friendly environment in the class where students do make mistakes but learn from them as well.

What if you are given a chance to bring some changes in examination system so that students Ct skills could be improved, then what would you do or suggest?

My suggestion in this regard would be..... assessment is very important but I have noticed that we ask such questions in exams which are based on memory or memory based things. I think teachers should be taught or they should keep this thing in mind that when they are designing a question paper they should pose such questions which give chance to every student to answer in their own context, based on their own analysis and evaluation. So first thing I would like to train teachers in posing right questions. Then I'll suggest that listening and speaking must be a part of examination I mean oral exam must be included. Because instant question answer involves CT and its not based on memorisation. I am suggesting this especially for functional English examination.

In your view what helped your students to learn English better?

The first and foremost thing was removing their shyness in class. Encouragement from teacher and allow students to learn English and allow them to make mistakes and learn from mistakes. For example if they write something wrong or use wrong phrases, expressions etc and they are suggested the corrections by teacher then they wont repeat those mistakes in future and that's how learning takes place.

You mentioned earlier that being a university faculty member you have the best resources available but what would you suggest for those who don't have these facilities yet they have to teach? And I would like to ask you that how do you manage your space problem, which you mentioned in your previous interview?

Well things can be managed but obviously needs extra effort. It was really difficult for me to manage space problem because the class rooms are very small so sometimes for few activities we go out in the lawns to perform different activities but I m very happy to tell you that soon we shall have our education block (in university) with big classrooms and activity halls constructed by USAID. But for those who lack facilities I can only suggest to help themselves. Arrange such activities, which need fewer resources, for reading comprehension newspapers, can be used. Teacher can bring in their own laptops in classroom if possible and get relevant material printed if not make their students available with Internet. That's all I can suggest.

Is there anything you would like to suggest for teachers or students that would help them to teach and learn Functional English better?

I would like to suggest not something to teachers but to policy makers that they should arrange different training for teachers because until n unless teachers are trained to teach , we would never be able to achieve the objectives of any policy. University teachers may get some opportunities of trainings but at college level teacher training programs are badly needed. For students I would like to suggest that they should get rid of their shyness and come up with their own ideas no matter what. Everybody learns from mistakes and teachers should make their students to learn from their mistakes.

Thank you very much for your time.

Appendix 4

Ethics Considerations



Plain Language Statement for Students

I am Shaista Irshad Khan, a PhD student in Education at the University of Glasgow. I am carrying out a research project to investigate the concept of Critical Thinking with undergraduate students undertaking English-I (Functional English) for ADE (Associate Degree in Education) / B.Ed Honours in two universities of Pakistan.

You are being invited to take part in this research study. Before you decide it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Ask me if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part.

The purpose of my research project is to study the development of critical thinking skills in the undergraduate students undertaking English-I (Functional English) for ADE (Associate Degree in Education)/ B.Ed Honours in two universities of Pakistan. This study will take approximately 3 years including 6 months of field work. My study will explore the implementation and students' perceptions of this new course in the class room.

You have been invited because you are a student of ADE/B.Ed (Hons) and your university/college is one of the pilot universities/colleges offering this programme.

It is up to you to decide whether or not to wish to take part. If you decide to take part you are still free to withdraw at any time and do not need to provide a reason. Your decision not to participate will not affect your grades.

In the event that you agree to take part in the study you will firstly be given a questionnaire to complete in the very beginning of the course/semester. The aim of the questionnaire is to gather information about you and learn about your experiences and practices in learning English and especially your perceptions about this new course. It is anticipated that this questionnaire will take 20 to 30 minutes to complete. Following this you will then be invited to take part in a Focus Group discussion to establish your thoughts and beliefs in respect of learning English and especially English-I (Functional English). The Focus Group Discussion will last approximately from 30 to 40 minutes and the session will be recorded by an audio recorder. I will take some notes based on my observation by attending your classes. By the end of this course/semester you will be invited to complete another questionnaire followed by a Focus Group Discussion to record your experiences and the outcomes of the course taught.

All information, which is collected about you during the course of research, will be destroyed at the end of study.

We aim to publish the results in research Journals and to present in different conferences. You can receive a copy of the results of this study and a copy of my thesis on request.

This research is being funded by:

Abdul Wali Khan University, Mardan., Khyberpakhtunkhwa ,Pakistan.

This study has been reviewed by the College of Social Science Research Ethics Committee.

For further information you can contact me on s.khan.2@research.gla.ac.uk or my supervisors Professor Vivienne Baumfield PhD Professor of Pedagogy International Dean South Asia and Eurasia, University of Glasgow. Contact details: Email Vivienne.Baumfield@glasgow.ac.uk
Phone: +44 (0) 141 330 6375/3450 and Dr. Dely Eliot, Creativity Culture and Faith RKTG, School of Education University of Glasgow. Contact details: Email Dely.Elliot@glasgow.ac.uk. Phone +44 (0)141 330 2467

If you have any concerns regarding the conduct of the research project you can contact the College of Social Sciences Ethics Officer by contacting Dr Valentina Bold, College of Social Sciences Ethics Officer, Valentina.Bold@glasgow.ac.uk

Plain Language Statement for Teachers

I am Shaista Irshad Khan, a PhD student in Education at the University of Glasgow. I am carrying out a research project to investigate the concept of Critical Thinking with undergraduate students undertaking English-I (Functional English) for ADE (Associate Degree in Education) / B.Ed Honours in two universities of Pakistan.

You are being invited to take part in this research study. Before you decide it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Ask me if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part.

The purpose of my research project is to study the development of critical thinking skills in the undergraduate students undertaking English-I (Functional English) for ADE (Associate Degree in Education)/ B.Ed Honours in two universities of Pakistan. This study will take approximately 3 years including 6 months of fieldwork. My study will explore the implementation and students' perceptions of this new course in the classroom.

You have been invited because you are teaching English-I (Functional English) to the students of ADE/B.Ed (Hons) and your university/college is one of the pilot universities/colleges offering this programme.

It is up to you to decide whether or not to wish to take part. If you decide to take part you are still free to withdraw at any time and do not need to provide a reason.

In the event that you agree to take part in the study you will firstly be given a questionnaire to complete in the very beginning of the course/semester. The aim of the questionnaire is to gather information about you and learn about your experiences and practices in teaching English and especially your perceptions about this new course. It is anticipated that this questionnaire will take 20 to 30 minutes to complete. Following this you will then be invited to take part in an interview to establish your thoughts and beliefs in respect of teaching English-I (Functional English). The interview will last approximately from 30 to 40 minutes and the session will be recorded by an audio recorder. I will take some notes based on my observation by attending two or three of your classes when convenient to you. By the end of this course/semester you will be invited to complete another questionnaire followed by an interview to record your experiences and the outcomes of the course taught.

All information, which is collected about you during the course of research, will be destroyed at the end of study.

We aim to publish the results in research Journals and to present in different conferences. You can receive a copy of the results of this study and a copy of my thesis on request.

This research is being funded by Abdul Wali Khan University, Mardan. Khyberpakhtunkhwa, Pakistan.

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For further information you can contact me on s.khan.2@research.gla.ac.uk or my supervisors Professor Vivienne Baumfield PhD Professor of Pedagogy International Dean South Asia and Eurasia, University of Glasgow. Contact details: Email Vivienne.Baumfield@glasgow.ac.uk
Phone: +44 (0) 141 330 6375/3450 and Dr. Dely Eliot, Creativity Culture and Faith RKTG, School of Education University of Glasgow. Contact details: Email Dely.Elliot@glasgow.ac.uk. Phone +44 (0)141 330 2467

If you have any concerns regarding the conduct of the research project you can contact the College of Social Sciences Ethics Officer by contacting Dr Valentina Bold, College of Social Sciences Ethics Officer, Valentina.Bold@glasgow.ac.uk

Preamble

The questionnaires will be administered by the researcher herself and this paper shall be read by the researcher before the students after handing them over the questionnaires in the first and second phase.

- 🗣️ Thank you for coming along.
- 🗣️ I am Shaista Irshad Khan, a PhD student in Education at the University of Glasgow. I am carrying out a research project to investigate the concept of Critical Thinking with undergraduate students undertaking English-I (Functional English) for ADE (Associate Degree in Education) / B.Ed Honors in two universities of Pakistan.
- 🗣️ You have been invited because you are a student of ADE/B.Ed (Hons) and your university/college is one of the pilot universities/colleges offering this programme.
- 🗣️ Today, there is an opportunity for you to complete a questionnaire but you can opt out at any stage. This questionnaire will only take about 20-30 minutes to complete and I hope you find the experience enjoyable.
- 🗣️ The questionnaire has eight questions; all questions are related to your learning experience of English. Keeping in view your English course please tick all the boxes which you find relevant/ close to your learning experience. If you come across any difficulty in understanding any questions please feel free to ask me for clarification.
- 🗣️ This questionnaire will be followed by a mini-focus group discussion of students and if you are interested to take part in it then please provide your contact details at the end of the questionnaire. You will be intimated about the date and time for the focus group discussion.
- 🗣️ Thank you.